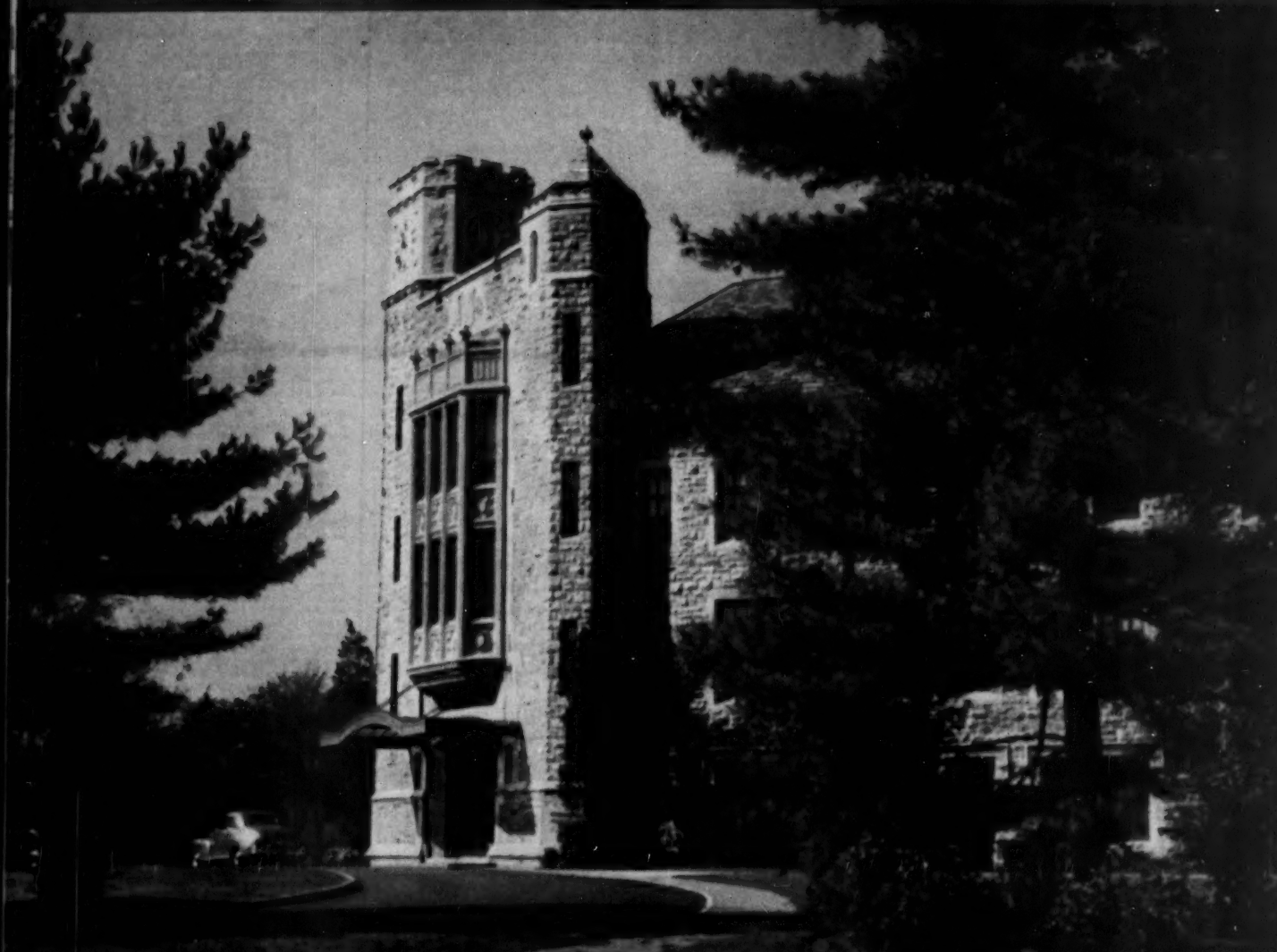


APRIL 1959

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HOW THE OFFICE OF EDUCATION CAN HELP YOU

It exists to be of service to school administrators. Don't
hesitate to use its many facilities

By **EARL J. McGRATH**
Guest Educational Commentator



Dr. McGrath just recently completed his first year as United States Commissioner of Education

At no time in our history has there been such a pressing need for educational leadership. Yet if school administrators are to give effective leadership, they must have the tools to do their jobs. And research surely tops the list of basic tools.

Were I to try to state in one sentence what function the U. S. Office of Education, Federal Security Agency, performs for you, I should say that it helps you by making the basic tools available. Facts about educational developments are searched out, analyzed, and dispatched to you—by way of your state departments of education, your professional organizations, and your own local systems. In addition, the Office helps you by diffusing information about education directly to the American people.

At best, it is difficult to keep up with the rapidly developing information that we schoolmen must have in order to give adequate service. Education has become one of America's biggest businesses. Approximately 32 million children and youth are enrolled in our educational institutions, and the annual expenditure for education is in excess of seven billion dollars. Yet size and expenditure, large as they are, do not begin to reveal the growing complexity of the character of education today. There is the key question of curriculum, for example. The curriculum is being healthily appraised and vigorously readjusted, and it is clear that the strains placed upon it by our technological society are bound to continue to bring profound changes in its content. Our schools, to be good schools, must be responsive to social change and social needs.

No Grace for Laggard

I emphasize this point only because the pace of today's living presents no grace period for the laggard. We schoolmen must find out where we are going, and why, or fail utterly to accomplish our goals.

Secondly, there is the relationship of the modern school to other institutions—to the home, to industry and business, to social service organizations, and virtually to every other organization in the community.

Next, the relationships between local school systems and state departments of education have increased and, in the same manner, the federal government and the state departments are working more closely together.

Such examples of our growing complexities could continue, but the point is that education today offers unprecedented opportunity for leaders who understand these complexities, and the inexorable way in which they modify the role of the school. This challenge is a vast one to the modern administrator. In addition to being an educator and a businessman, he must also be familiar with the social soil of the times and, in short, be something of a social scientist.

Some 200 of your colleagues are at work in the federal government, giving a variety of services so great that I shall only indicate how they can help you promote the cause of education. Many of you they help directly by correspondence. In great numbers administrators write in requesting information about good school building standards, the loan of a broadcasting recording, reports on trends in guidance, patterns for the organization of elementary education in city school systems, and surplus property from the federal government. The list is endless, and many of you have doubtless requested other kinds of information and services, but let us look at one of these fields to see the kind of information that is available upon request.

Surplus Property Requirement

Let us suppose that you are interested in acquiring surplus property from the government. In the last three and a half years, approximately 5,500 educational institutions have acquired more than 106,000 acres of land and over 24,500 buildings at an average cost of about 3 1/2 percent of the fair value of the property, or 6/10 of 1 percent of the original cost, which was almost \$500,000,000. During the same period schools, colleges, and universities shared in the distribution of materials, supplies and equipment which cost more than \$400,000,000. This was federal property considered surplus to peacetime needs.

Further, a recent law recognized that peacetime operations of the armed forces, the Veterans Administration, the Department of Agriculture, and other executive agencies of the federal government resulted in the accumulation of large quantities of used or obsolete equipment and supplies which are usable and

necessary in the operation of our educational programs. Also many buildings and a large acreage of land are disposed of annually by the federal government (Turn to page 8)

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SCHOOL MANAGEMENT

ADMINISTRATION, EQUIPMENT, MAINTENANCE

Published monthly at Orange, Conn., by
SCHOOL MANAGEMENT, INC.

A subsidiary of the
Publishers of Parents' Magazine

52 Vanderbilt Avenue
New York 17, N. Y., U.S.A.

Address correspondence to N. Y. office

Chicago Advertising Office
360 N. Michigan Ave.

President & Publisher
GEORGE J. HECHT

Publisher also of Parents' Magazine

LUCILE D. KIRK, Executive Editor

MAIDA R. DAVIS, Assistant Editor

Educational Commentator

EDGAR W. KNIGHT

Kennan Professor of Education

University of North Carolina

Subscription rate \$2.00 a year

Single copy 30¢

Acceptance under Section 3626

P. L. and R. authorized



CHARTER MEMBER OF



APRIL, 1950

VOL. 19, NO. 9

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Contents of this issue are listed in Education Index

WHEN HE'S GOOD— HE'S QUITE A GUY

Here are noted the essential characteristics
of a good building-service employee



By CHESTER L. TUTHILL
Assistant to the Superintendent of
Buildings and Grounds
Teachers College,
Columbia University

Building-service work is some of the most important work in the world. It can not be done, and done properly, by just anyone. It takes a man with a lot on the ball to achieve success in it. Here are four items which I consider the chief characteristics of a good building-service employee:

1. Awareness of responsibility.
2. Intelligence.
3. Knowledge of the job.
4. The possession of a well-balanced personality.

The building-service employee's responsibilities are many and varied. First, he has a responsibility to his employer to do what he was hired to do, and do it to the best of his ability. Second, he has a responsibility to the general public to give service when the need for that service is greatest. Third, he has a responsibility to himself to gain from the job the greatest degree of self-satisfaction that he can, and to do the job in such a manner as to reflect credit on himself.

The biggest responsibility, however, lies in the job itself. Every building-service employee is responsible for the care and protection of extremely valuable property. The good building-service employee will see that he gives such care and protection fully.

Since the tools and appliances which are used in the work are those parts of the property with which the employee has the most constant contact, extra attention should be given to their care and protection. The good employee will see that these items are not damaged or destroyed either by himself or by others. He will keep them in good working order. He will not neglect them, since neglect can be quite as damaging as out-and-out abuse. The condition of a person's tools is a good indication of the standard of work that he will produce.

Poor Tools, Poor Work

When tools are used jointly by more than one employee, the good building-service employee will see that he does more than his share to keep these tools in good condition. When tools or equipment are worn out, he will not continue to use them at the expense of the work. He will see that they are replaced.

However, he will use tools wisely and to the fullest extent. For instance, he will use a floor-brush that has ceased to be effective in a classroom for corridor work. When it has ceased to be effective there, it can be effectively used on rougher surfaces, cement basement floors, sidewalks, and so forth.

Along with the responsibility to care for

tools is the responsibility for keeping all parts of the building orderly, especially work-rooms and areas in daily use. Such orderliness is necessary for obvious reasons; daily cleaning operations are speeded up if this condition exists, time and effort need not be expended looking for mislaid tools or equipment, and so on.

The good building-service employee will take every opportunity to effect savings in the utility group, reducing operating costs by careful checking of water systems,

repairing leaks as they occur; by preventing waste of electricity for light or power; and by keeping a watchful eye on the heating plant and ventilating systems.

Every daily task that arises demands use of good judgment. If it is not judgment in selection of proper tools with which to do the work, it is judgment in selection of the proper method of doing the work. Some of this is the result of training, but not all. The good building-service employee, be he washing walls or dusting furniture, will realize the responsibilities involved and act accordingly. Failure to use good judgment too often causes confusion, loss of precious time, financial loss, and waste.

Safety Check Ups

In order to reduce the danger of fire, the good building-service employee will make efficient checks of his buildings and equipment at periodic intervals to see that all fire hazards are removed or made safe. Observing simple safety rules of fire prevention is a mandatory duty of all building-service employees.

But should a fire start, the good building-service employee will act quickly, first to report the fire to the proper authorities; second to see that all persons are removed from the endangered area; and third, if the blaze is small enough to handle, to do all he can to extinguish it before it spreads. All this he does in a calm, unexcitable manner in order to prevent panic. He will have thorough knowledge of the exits. He will know how to operate the fire-fighting apparatus as well as know that it is in proper working order and always ready for service.

Fire is not the only menace. Safety is endangered in any number of other ways; all of which the good building-service employee will take steps to correct; to enumerate a few, obstacles on stairs, stairs or masonry in a state of disrepair, insufficient lighting, and the like.

If conditions of a high order of safety prevail, comfort will generally follow. To insure comfort, a good employee will see that all apparatus at the disposal of the public is clean

and in working order, particularly drinking fountains, and dressing rooms or toilets.

Plumbing facilities should be given extra care to prevent any unnecessary inconvenience on the part of the public caused by negligence on the part of the employee to maintain them properly.

The good building-service employee will have a high regard for his own health, for only in so doing will he be in a position to guard the health of others. Failure to perform his daily duties in the prescribed manner can easily jeopardize the health of the public. Failure to give proper attention to his normal cleaning duties, or failure to keep heating plant or ventilating facilities in proper working order are all inimical to the public health.

Just how much authority should go with responsibility? Without authority to make decisions without fear of retribution, an employee is powerless to do effective work.

The second chief characteristic is intelligence. That the good building-service employee is basically intelligent sounds like an elaboration on the obvious, but there are plenty of building-service employees today who sometimes do not act very intelligently. In fact, sometimes they act downright stupid. My interpretation of intelligence is the realization of responsibilities and the ability to act on them fully and effectively.

Keep Abreast

One of the things basic to intelligence is the ability to keep abreast of the times. The intelligent employee will realize that the old way is not always the best way; in fact, the best way today may not be the best way tomorrow.

As regards intelligence toward tools and materials, the good building-service employee will know what, when, and how much to use of both. By doing so, he will effect real economies, especially if he realizes the falsity of the philosophy of so many building-service employees that "If a little is good, more is better." Wise choice and use of materials and tools will greatly prolong the life of the physical plant whose value is so great.

The good building-service employee with his heavy schedule of duties will use methods that are the least fatiguing and the most efficient. He will think out a job before tackling it. He will make the most of experience. He will realize that proper use of methods and materials can take the drudgery out of much of the work, thus making it easier to do. Time and motion studies have been a great aid in giving new impetus to this work by doing just that.

The intelligent building-service employee can and will follow directions as they are given. Although it is generally conceded that it is good to inform the employee "why" certain materials or methods or tactics are used, it is not always necessary to do so. The good building-service employee will be able to reason out "why" in many cases without having to be told. The intelligent employee will also remember directions and not require being retold every time the job comes up. He will catch on to new work quickly and easily, and be slow to forget.

There are many problems encountered daily whose best solution lies in the exercise of imagination, where more scientific problem solving may fail to produce an answer.

Initiative, too, is desirable to a certain degree. Both initiative and imagination, however, must operate within certain limits; the former within the limit prescribed by the responsibilities inherent in the job, and the latter within the limit prescribed by its practical application.

The required amount of formal education for a building-service employee varies. In many cases, the ability to read, write, and to speak

(Turn to page 7)

THE COMMUNITY USES SCHOOL BUILDINGS IN OAK RIDGE, TENNESSEE

You can visit the schools almost any waking hour and find plenty of activity going on

THREE o'clock! The dismissal bells ring, and children pour from the school buildings of Oak Ridge, Tennessee's "Atomic City," as eagerly as from those of any schools across the land. But while elsewhere the doors may be locked behind them and the buildings remain empty and unused until their eight o'clock invasion the next morning, that doesn't happen at Oak Ridge. Necessity—the lack of other public buildings in which the people of the war-born city might meet to begin a normal community life—drove them at first to their school buildings. Today almost regardless of clock or calendar, lights burn in the Oak Ridge Schools. Permits for 21,438 different meetings held in the 11 schools were issued between August 1, 1948 and August 1, 1949.

For in Oak Ridge there are virtually no facilities other than the schools for meetings of public groups, clubs, or other organizations.

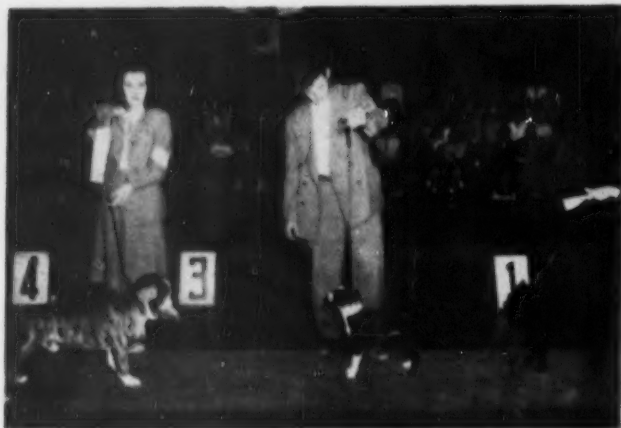
By **ALBERT T. BISHOP**
Assistant Superintendent of Schools
and
PHYLLIS CHRISTIANSEN
Journalism Teacher
Oak Ridge, Tennessee

There are no church buildings in the normal sense, although 16 different denominations want to erect them and the Atomic Energy Commission has agreed to sell land for this purpose. All the land in the city is owned by the Commission, which leases or rents it to private users. The city is operated by a city manager under the aegis of the A.E.C. Intensive study is being given to incorporation as a "normal" municipality and to the manner in which ownership of the land will then be handled. These factors combined have led to

the very heavy use of the school buildings for all kinds of community purposes.

The high school in particular is in almost constant use. The auditorium, with a seating capacity of 600, is too small, yet it is used for church services by different denominations several times on Sunday. Baptists, Episcopalians, Methodists, and Jews are in the same building at the same time, and their close association is an inspiring thing to see. Because of the lack of churches, 10,000 people use the schools on Sunday, 2,600 the high school alone.

Funerals and weddings have been held in the schools, particularly in the auditorium. Musical artists perform there. The dramatic group presents its shows, and political rallies are held. Though work needed to be done on the stage lighting system, it could not be started for six months since the auditorium was booked solid during that period! The adult education pro-



gram is conducted at the high school up to 11 o'clock at night. The custodial crew works all night to prepare the rooms for school next morning. The building is in such constant use that there is difficulty in getting it for a long enough time to seal the floor properly.

The gymnasiums are used extensively by organizations outside the schools. For instance at Jefferson Junior High, a school with two gymnasiums, one Sunday found one gym housing a pedigreed dog show, the second gym housing services commemorating the resurrection.

Almost any Wednesday evening, you will find basketball, volleyball, softball, badminton, prayer meeting, folk dancing, tap dancing, and perhaps a meeting of young scientists in the school buildings.

The intensive use of the schools as a cultural center can be demonstrated by the program for the high school on a typical week end. An operetta is given on Saturday evening; then the custodial crew prepares stage and auditorium for Sunday morning church services. More cleaning is done in the afternoon, and the stage is prepared with risers for a choir program at four o'clock. Then the stage is cleared for church in the evening, and finally a last clean-up is made for school on Monday morning.

High standards of cleanliness and sanitation are maintained. This is costly, especially when it is remembered that the week-end force is on overtime. The nominal fee charged nonschool groups does not cover the additional costs of operation resulting from such use, but this is done deliberately inasmuch as it is felt that the schools should contribute to the life of the community over and above their daily use for instruction. A study to determine just how much community use increases operational

(Turn to page 6)



You name it—any cultural or recreational activity you can think of. Chances are that you will find it in one of the Oak Ridge school buildings after regular school hours. Church? At least 16 different denominations hold services in the high-school auditorium on Sundays. Dog shows,

yes, and even turtle races? They, too, take place in the schools. Many a fine discussion group, many a lively folk dance, patient orchestra rehearsal, thrilling basketball game brings out active participants. The cleanup crew is probably the busiest in the nation!



This Community Uses Its School Buildings

(Continued from page 5)

costs is now in progress. However, such use has resulted in a net saving to the city to date, because it has done away with the cost of the erection of additional buildings.

How does it happen that Oak Ridge, the fifth largest city in the state, is without the public meeting places one might expect in a city of 33,000? The

answer is contained in a short history of the growth of the city that was, almost literally, "born yesterday." In 1942, only eight years ago, a map of Tennessee made no reference to such a city as Oak Ridge, for at that time it was not in existence. The only reference made to the location was the designation "Black Oak Ridge" given to the hill

that forms the northern border of the present city.

It was during the early months of the war that men sought a place where highly secret and potentially dangerous installations could be constructed, away from the populous centers, yet close enough to forces and agencies necessary to the successful operation of the project.

The present Oak Ridge area afforded such location because:

1. It was located in the hills and valleys of East Tennessee only 20 miles from Knoxville.

2. Streams and rivers afforded natural protection.

3. Power lines of the Tennessee Valley Authority crossed the site.

4. Main highways and railroads were near.

The project was a fabulous job in every respect. The job of plant construction was almost beyond the power of imagination. It was further complicated by the fact that personnel of the highest type would be required to carry on the research and production after the plants were completed. If these people were to be attracted to Oak Ridge, comfortable housing must be offered them. Enough housing and hotel space was found for those who came at the inception of the project, but since the surrounding towns and cities were already overcrowded, a new town had to be built.

Tremendous Growth

At first, Oak Ridge was to be a small, compact community of 3,000 houses on the southern slopes of the "Ridge," with dormitories, business center, project offices, warehouses, and laboratories on the valley floor. But ink was hardly dry on one set of plans before greater expansion became necessary. Finally the town stretched for seven miles along the slopes of the Ridge, with masses of dormitories, huts, and trailers spread across the valley. Such was Oak Ridge in wartime, the fifth largest city in Tennessee, with a population of approximately 75,000.

It was the Manhattan District, special branch of the Corps of Engineers, U. S. Army, that acquired the 59,000 acres for the construction of the atomic energy plants, and this same organization continued to operate the project until 1947, when the Atomic Energy Commission assumed control. Until March, 1949, Oak Ridge remained a city with bustling shops, crowded schools, and busy traffic, completely owned and operated by the Federal government and accessible only to those who had business there and who could present the proper credentials at the gate of the closely guarded project.

It is the announced intention of the Atomic Energy Commission to continue to give Oak Ridge a greater degree of normality, yet the security and efficient operation of the plants must be maintained. Plans are being studied for possible incorporation of Oak Ridge as a municipality. Negotiations are under way to permit businessmen to build and operate their own stores, theaters, garages, and other commercial facilities. Organizations will be allowed to build churches, clubhouses, and the like. Individuals may be permitted later on to buy land and build houses.

A Modern City

Today Oak Ridge is an attractive city of 33,000. Except for its location in the rolling uplands of eastern Tennessee, few of the features of its "early days" remain the same. The valley in which it lies was timber and grass as recently as 1942, muddy streets and plank walks for some time thereafter. A planned city, today it has lights, sidewalks, signs, and streets which are beautifully surfaced and lack blind corners, as in any well laid out town.

Half a mile wide and seven miles long Oak Ridge has a shopping center near each end and another in the middle, each with the essential retail and service stores, a theater, restaurants, and so forth. A splendid civic and administrative center is planned, and visitors say it will be one of the most attractive

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small cities to be seen in the country. The population is cosmopolitan, with a high proportion of technical and professional people. It is composed mainly of young family groups with small children, although there is an increasing number of children of high-school age. There are 11 schools with a total enrollment of 7,000. Of these, nine are elementary schools with 5,000 pupils, one a junior high with 1,300, and a senior high of 800.

Plans are under way to use the present senior high as a junior high and to erect a new senior high with a capacity of 1,500. In the new high school there will be a 1,500 capacity auditorium. It is planned not only to serve the school's needs and purposes, but also to be used by the community for a civil auditorium as well. The need for expansion is increased by an anticipated influx of 3,500 construction people required for erection of a new \$70,000,000 plant over a period of the next three years.

Meanwhile, to pursue the many phases of an exceptionally rich and varied community life, the people gather in school buildings which are theirs and theirs to use. It has been pointed out that this use resulted in a net saving to their city. It has also given people more familiarity with and a greater appreciation of their school system, which, in turn, makes it easier to gain support for school projects.

When He's Good He's Quite A Guy

(Continued from page 3)

English is sufficient. However, the minimum basic schooling seems to be, in general, education through the eighth grade. Many present-day building-service employees were unable in their youth to obtain even this amount of education, but the wisest among them have since taken advantage of other opportunities to broaden themselves.

Under present circumstances, it seems wise to request that all newcomers to the occupation have at least this amount of education. If they haven't availed themselves of the educational opportunity offered by our free public school system, they probably are not capable of doing what would be required of them in building-service work.

Some building-service administrators think that education through the eighth grade is insufficient. They feel that since building-service work ranks in importance with other public service occupations, it should have the same educational requirements as they do. This usually means a high-school education or its equivalent.

The third characteristic is that of knowledge of the job. Although it is not necessary that the good building-service employee be thoroughly trained, some training is desirable. Where such training is not available, the employee is at a distinct disadvantage, though not for long, if he has that fundamental intelligence. If he is quick to realize what the job demands, if he is able to catch on quickly to methods and is adaptable to new ones, if he is able to realize his place in the over-all scheme of things, he will probably make out well enough. However, he must learn rapidly the best and most efficient ways to perform his duties. He must eventually be able to work fast and well and must have a willingness as well as the capacity to learn.

The good building-service employee will gain respect for both himself and the employing institution by displaying a sincere interest in his work.

This brings us to the fourth char-

acteristic, the well-balanced personality. Under this heading there are a number of desirable traits which the good building-service employee will have. He will be courteous, well-mannered, even-tempered, reserved, dignified, dependable, honest, and willing to render service.

He will show courtesy to all, employer, public, and co-workers alike. When talking to someone it is his job to serve, he will be at ease, and talk distinctly. He will not be humble.

The good employee will be even-tempered; he will not act impulsively. If he feels he has been done an injustice, he will take the case to his employer or supervisor rather than retaliate in kind. He will not be scatterbrained, but will act maturely and will substitute intelligent problem-solving activity for snap-judgment when confronted by a frustrating situation.

He will act reserved and dignified, yet smile or laugh should the occasion de-

mand it. His speech will be temperate as will his drinking habits, particularly when on the job. He must be continually on the alert to create a wholesome atmosphere about himself and about the work he does.

Dependability is an extremely valuable asset and important in a good building-service employee. Lack of dependability is a grave disrupter of schedules and ruffler of tempers. Married men are probably better suited to do building-

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When He's Good He's Quite a Guy

(Continued from page 7)

service work rather than single men. In them, the need for security is greater and, as a result, there is more necessity for dependability.

Finally, the good building-service employee must be willing to render service willingly and when its need is greatest. His business is selling service, and he must give it readily and cheerfully. It

is an asset if he is able to get along with people easily, for the smoother he himself can make this relationship, the better off he'll be.

As to personal appearance, the slovenly person is no inspiration to those among whom he works. Furthermore, carelessness in personal appearance is often an indication of carelessness in work. The

good building-service employee will enhance his personal appearance with a daily bath and shave, neat hair and fingernails, and clean conservative clothing, if no uniform is supplied.

The Seven Essentials

In summary, I should say that these things are essential in a good building service employee:

1. The good service employee must have respect for building-service work.

2. He must be reasonably intelligent.
3. He must realize what is expected of him, and must act accordingly.
4. He must be willing to render service.
5. He must have a pleasant personality.
6. He must be thoroughly honest.
7. He must be socially acceptable.

How the Office of Education Can Help

(Continued from page 2)

as a result of changing government programs, and much of such surplus could be used to great advantage for educational purposes. Provisions were therefore made for continuing the donation of surplus equipment and the disposal of surplus real property with "public benefit allowance" to educational institutions, upon determination by the Federal Security Administrator, through the Office of Education, that such property is usable and needed for educational purposes.

Because the Office staff provided for the program is small, surplus property is made available to local school systems through agencies established by the various states. Any school administrator who is not familiar with the surplus property program should request information from the state educational agency for surplus property, generally located in the state department of education.

This is no longer a "war surplus" program. One county superintendent in Tennessee reported recently that through the surplus property program during the school year 1948-49 he had been able to add in the county schools improvements, equipment, and supplies valued at approximately \$100,000 in excess of the costs to the county. In the past six months almost 27,000 surplus typewriters have been distributed to schools, colleges and universities in the 48 states and the District of Columbia, at costs in packing, shipping and handling which constitute but a fraction of their value.

If you cannot locate your state educational agency for surplus property, the Office of Education will be glad to send you the proper address and the name of the director.

Other Programs

Other phases of work supporting your efforts to offer better educational services must include mention of the following important programs going forward in the Office of Education: life adjustment education for youth, the education of exceptional children and youth, teacher exchanges between the United States and other countries, and the advancement of the teaching profession. In 1946 the Citizens Federal Committee on Education—serving the Office of Education as lay advisory arm—cooperated with other national educational groups in obtaining the services of the Advertising Council of America which to date has presented more than 1,000 radio network shows carrying messages about the educational crisis. American business, which backs the Advertising Council, is to be thanked for thus putting the facts before the American people.

As every school administrator knows, the Office of Education, under the National Vocational Education Acts, allots funds to the states to assist in the promotion and further development of vocational education programs of less than college grade and to make studies in the field of vocational education. Major types are agricultural, business, home economics, trade and industrial, and oc-



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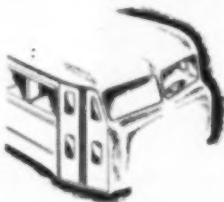
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occupational information and guidance. Recently a great step toward better service was taken when an advisory working council, composed of state directors of vocational education, was established to serve as liaison between the states and the federal government. It is anticipated that the entire program will be strengthened as a result of this type of two-way traffic now established between state and federal offices.

Whatever the projects developed in the Office of Education—and I repeat that I am only indicating their scope here—they have the same focus as your own local projects: each and every boy and girl. And we all have the same goal: better educated citizens with deepening insight and the growing ability to face tomorrow with confidence. Such similarity of purpose may not be apparent at first glance. A compilation of state laws might, for example, seem far removed from your goal. But consider what value such a compilation would have for a state superintendent of schools. Would he not be interested in the detailed story of what other states are doing to care for exceptional children—the gifted as well as the handicapped? Or what steps other states are taking to improve teachers' salaries? Or what special machinery some states have used to accomplish local school administrative unit reorganization?

Aids for Many

Consider, too, the value certain basic studies have for all administrators, local as well as state. And schoolmen are concerned with the long-range investigations we are making on teaching methodology, aids to instruction, the character of the learning process, the social development of children, and the current critical questions relating to the drop-out rate.

The number of administrators who have research units attached to their offices are of growing importance to the total educational scene. But most deal with local problems and would not find it appropriate to undertake the broad, fundamental research that is so badly needed, in far greater abundance than exists at present, for sound leadership.

Going from the general to the specific, let me cite several examples, from quite different fields, to illustrate the wide variety of efforts currently carried on in behalf of school administrators. First, let us see how the Office is prepared to carry on consultative services.

At a 10-day work conference of school superintendents held at the University of Tennessee in April, 1949, and sponsored jointly by that university's department of education and the state department of education, three specialists from the Office of Education participated throughout. Three general problem areas of concern to superintendents from all over the state were under discussion: the nature and function of the school superintendency; school buildings and grounds; and school transportation.

Staff Is in Demand

Similarly, Office of Education specialists are increasingly in demand for assistance at national conferences. A good example was the one held at Jackson's Mill, Weston, West Virginia, by the National Conference for Facilities for Athletics, Recreation, Physical and Health Education. An Office staff member served as director of the two-week workshop, and several other staff members gave consultative services on developing better standards for functionally designed athletic and recreation facilities.

More recent have been the life ad-

justment conferences, both regional and national, at which Office of Education staff members gave leadership which undoubtedly helped the conferences to culminate in the establishment of the Commission for Life Adjustment Education for Youth. The action program resulting from this achievement is familiar to all administrators. Among the states there is increasing demand for personal Office assistance as well as for publications listing suggestions for start-

ing of state life adjustment programs.

Finally, a word about the Office information program which is, I believe, indispensable to forward-looking administrators. Aside from its regular official periodicals, *School Life* and *Higher Education*, which schoolmen find useful, the Office develops pamphlets or bulletins to meet persistent needs in a single area. I would urge you to obtain the annotated list of 25 recent publications of the Office of Education by writ-

ing the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Subscribers to *School Life* can follow the announcements of new publications as issued, as well as reports on current research accomplished by Office specialists. I particularly commend the following publications to my colleagues in the field of educational administration. Their titles are self-explanatory:

Organization and Supervision of

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How the Office of Education Can Help You

(Continued from page 9)

Elementary Education in 100 Cities. Bulletin 1949, No. 11. 25¢.
Improving School Custodial Service. Bulletin 1949, No. 13. 15¢.
Broadening the Service of Small High Schools. Bulletin 1948, No. 9. 15¢.
Atomic Energy Here to Stay. 10¢.
Intellectual Abilities and the Adolescent Period. Bulletin 1948, No. 6. 15¢.

Records and Reports for Pupil Transportation. Spec. Series No. 2. 20¢.
Class Size—The Larger High School. Circular 305. 20¢.
Large and Small Classes in Secondary Schools. Circular 306. 20¢.
School Fire Drills. Pamphlet 103. 10¢.
Lighting Schoolrooms. Pamphlet 104. 10¢.

Adult Education Activities of the Public Schools, 1947-48. Pamphlet 107. 15¢.

Education Directory, 1949-50. (Part 2) Counties and Cities. 20¢.

What Teachers Say About Class Size. Circular 311. 20¢.

(Editor's note: All Office of Education publications must be ordered from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Government publications are inexpensive, but must be paid for in advance.)

For more facts use Inquiry Card, RM-3K



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On the Calendar

Association for Childhood Education International 1950 Study Conference. Asheville, North Carolina, April 9-14. Theme is "Using What We Know for Children—in the School, Home and Community." Program will include study classes, forums, and workshops.

American Association for Health, Physical Education, and Recreation. Dallas, April 18-22.

Schoolmen's Week. University of Pennsylvania, April 18-22.

Television Education Conference. sponsored by the Philadelphia Association for Education by Radio, Philadelphia, April 20-21. For information on this conference, write to Sam Serota, Radio Station WIP, Gimbel Brothers, 35 South 9 St., Philadelphia 7, Pa.

National Music Week. May 7-14.

National Conference on Citizenship. Washington, D. C. May 22-24.

School Custodians' Conference. Purdue University, Lafayette, Indiana, June 12-14.

Mount Holyoke Institute on the United Nations. South Hadley, Massachusetts, June 25-July 22.

NEA Commission on Teacher Education and Professional Standards. Indiana University, Bloomington, June 28-July 1. Subject is "Standards for Teacher Education Institutions."

Elementary School Principals. St. Louis, July 2-7.

National Education Association. St. Louis, July 2-7.

National Audio-Visual Association. Chicago, July 30-August 2.

Association of School Business Officials. Hotel Sherman, Chicago, September 25-28.

County and Rural Area Superintendents of Schools. Columbus, Ohio, October 9-11.

American Education Week. November 5-11.

School Food Service Association. Muehlenbach Hotel, Kansas City, Missouri, November 8-10.

School Transportation Figures Are Up Again

LAST year there were fewer than 75,000 one-room schools in this country, compared with 107,000 in 1941. This continued conversion of our old traditional one-room system to the modern consolidated school system has been due, in large part, to continued expansion of school bus transportation facilities.

This expansion is further indicated by the fact that the number of children using school buses daily has increased from 5,416,000 in 1948-49 to 5,720,000 in 1949-50, a gain of nearly 6 percent. The number of buses in school operation increased from 90,400 to 97,583, a gain of 7.96 percent. These buses will travel 2,079,384 miles to 45,256 schools during the current school year.

Another significant change is the increase of \$32,332,000 in the cost of pupil transportation. This represents an increase of 22.27 percent for 1949-50, from \$145,200,000 to \$177,532,000. The estimated cost per bus mile has risen from 20.32 cents to 24.12 cents, an increase of 18.72 percent.

Nation-wide reports indicate that this growth will continue during 1950-51. . . Reprinted from the February, 1950, issue of *Bus Transportation*. Copyright, 1950, McGraw-Hill Publishing Co., Inc. New York 18, N. Y.

ON page 39 of our March issue, "Newspaper of the Air" was condensed from *Ohio Schools*. This credit line was inadvertently omitted and we regret it.

The Justifiable Maintenance Budget

By ARNOLD M. NESS
Secretary, Newark, N. J.
Board of Education

BOARDS of education expect school business officials to give the professional service necessary to maintain the school plant with a minimum of expenditure. Those officials need to know just what a justifiable maintenance budget is.

Let us consider maintenance as all expenditures relating to upkeep of grounds, buildings, furniture, and equipment, including repair and replacement of already existing items.

There are several pitfalls to be avoided in this connection. New or additional installations should not be charged to maintenance but should be considered capital items. Such jobs as keeping the buildings and grounds open and ready for use, the taking up and moving of furniture, playground and gymnasium equipment, snow shoveling, and ash removal are not maintenance. They should be considered operational items.

Since what is justifiable in one district might be considered neglect in another or over-expenditure in a third, the term needs analysis. There are many factors involved.

Size Affects Costs

Community size will affect any comparison of maintenance costs. In smaller communities maintenance work may be done by janitors or shop teachers, while in larger communities there may be a maintenance staff and a diversity of methods and problems.

Original design and construction of buildings is another important factor. It is obvious that old gingerbread design buildings with poorly planned roofs, under-sized heating plants, buried plumbing, and cheap floor construction will increase maintenance costs.

Community factors play a big part in maintenance planning. For example, a school program with a rigid educational philosophy behind it—one which approves fixed furniture and just enough room in the classroom for desks—has less of a maintenance problem than one where movable furniture is used and adequate play and work facilities are provided.

If community standards are satisfied with run-down buildings, one set of toilets in the basement or yard, poor rather than adequate lighting, and drinking fountains that are only turned on at certain hours, there may be a maintenance budget which reflects these standards.

Expensive Negligence

If the quality of repairs is not important to the board of education, the maintenance budget will be smaller. A policy of getting everything cheaper or practicing deferred maintenance to cut budgets is often a penny-wise and pound-foolish attempt to keep costs down. It may eventually result in need for a project so large it must be handled as a capital item. Buildings that have been neglected in the past are expensive to maintain.

Where city funds are used in addition to the board of education budget for such operational expenses as playgrounds and lunchrooms, and budgeted school funds are used for their maintenance, the yardstick used to justify maintenance expenditures will be affected by these extra expenditures.

Accounting procedures of the board affect the maintenance budget. Hidden expenses or expenses charged to the wrong account create a false picture.

Charging electric fixtures to the light and water account, charging to operation the maintenance work done by janitors, and the keeping of poor records by a repair division are types of things that give an inaccurate impression.

One more important factor to be considered is the qualification of the person in charge. In New Jersey we feel an administrative organization of the business division headed by a well-trained practical school executive responsible di-

rectly to the board of education is the most practical approach to the problem. Poor supervision and a lack of know-how by those in charge is reflected right down through the ranks of maintenance employees, and is even reflected in contractual costs that are part of the program.

All the above factors are part of a maintenance measuring stick that is obviously flexible. But the key to the maintenance budget is long-range planning. A careful study will reveal the relative importance

and frequency of occurrence of jobs that must be planned for. Many available books and articles will help in this task. And because complete knowledge is necessary, every individual employed by a school board, no matter how minor his position may be, can contribute to budget preparation.

Long range planning will distribute larger items of repair and maintenance over a number of years, and yet provide for immediate needs and take care of ex-

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The Justifiable Maintenance Budget

(Continued from page 11)

extraordinary repairs as far as possible. Every building should become a unit in budget preparation. With the assistance of teachers, principals, and custodians, the business department should make a study of each unit and list in detail the recurring items of maintenance, and a program of repair that will put the school plant in a desirable condition.

The repair budget should be prepared in the central office and should be made up of two parts. Part one is composed of the known factors that are more or less fixed. In this category are such items as salary of mechanics, materials needed to supply the maintenance staff, and routine recurring items that will be let out at contract.

A careful study should be made of these items, and estimates made that will stand up when bids are requested. The board should have a business department that can make these estimates without having to call in various contractors and ask them what they think a job will cost. The method of using the free services of contractors to prepare a budget is not only unfair to the contractor, but often costly to the board since the contractors know that these on the inside are not able

to judge intelligently the amount and cost of work being considered.

The second part of the budget is made up of larger projects selected from the long-range plans previously made. In this category will be such items as roof repairing and replacement, new floors, modernization of toilets, rebuilding of cafeterias, fireproofing of stairways, play areas, and resurfacing interior and exterior painting. Selection of these larger items will be governed by the urgency of their need, ability of the community to pay, and the many community standards previously listed.

As a matter of policy, large contingent amounts should not be carried in the maintenance budget regularly. The so-called cushion is not justifiable, since all boards of education have the right to meet extraordinary emergency expenditures by borrowing on anticipated revenue, going back to a board of school estimate for additional moneys, having special elections, or getting money in some other manner provided by state laws.

Ready for Study

After adding the known costs and the estimates for the balance of work to be done, the budget is ready for study and comparison—always keeping in mind the many factors involved in the individual community. There are, however, outside limits that may safely be used in spite of local conditions.

The first measure is a common understanding of a building in good condition. A tight roof, clean and adequate toilet facilities, a relatively fire-safe building, furniture in repair, clean walls, average lighting of at least 20 foot-candles, grounds neatly kept, and comfortable heat or fresh air according to the season of the year constitute the general requirements of average upkeep.

A second measure of a maintenance budget for keeping the average school plant in good condition is having it fall between 3 and 6½ percent of the entire budget. Where, within that range, any one budget should be, will be governed by many factors. But as a general rule, the larger the budget the nearer it should approach the lower percentage.

An expenditure of from 2 to 3 percent of the original cost of the plant might be used as a measure of adequate or justifiable yearly maintenance.

What Percentage?

An expenditure of from 1½ to 2 percent of the present value would measure adequate maintenance on a plant whose value has been established within the past year or two. But it will not apply where there are either all old or all new buildings.

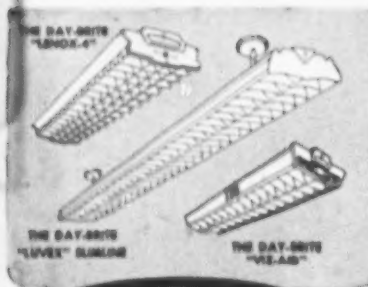
Figures recently published in *School Business Affairs* substantiate these percentages. And I have spent many hours discussing percentages with school business officials in New Jersey as a background for using these percentages as a method of justifying the maintenance expenditures.

Some budgets will fit within the range of all three percentage methods. Others may fall within the scope of one of the percentages suggested. If the budget does not fit any of them, a careful study should be made to see where the difference occurs. Under-expenditure now may lead to abnormal expenditure later. Over-budgeting now may be due to wasteful spending or poor management, or may provide opportunities for spending what would not be there had the budget been kept within proper limits.

From a talk at the ASBO Boston meeting.

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012

One or Two-Story School Buildings? Cost Is Not the Only Factor to Consider

By CHARLES A. WHITTON
Director of Architectural and
Engineering Services,
Oakland, California, Public Schools

AN architect's only guiding thought, in the first preliminary study for a school building, should be "What is the best school building going to be in this particular case?"

Of course, later on this best solution may be modified by the limitations which have been imposed on him. But if the architect never allows himself to go farther than the early limitations, and attempt the real best possible solution, the final result may fall so far short of perfection as to be detrimental to his own reputation and a sorrow to the community.

Problems Vary

Statistical comparisons will not help the architect much. And there is great difficulty in using the experience of one part of the country as a standard for some other part. A recent tabular comparison of 42 elementary and high-school buildings being constructed in the United States illustrates this. (*Engineering News Record*, September 8, '49). The amount of space allowed in the total building per elementary pupil varies from 35 to 116 square feet. Thus some communities find their solution in erecting three times as much school building as other communities. Along with these variations go differences in structure, finish, and built-in equipment. To avoid the complications implicit in all these variations, it seems wiser to discuss only one and two-story buildings in a simple way and from only a few points of view.

In the city of Oakland we recently occupied two new junior high-school gymnasiums. Through analysis of actual figures we can show that comparative costs of these buildings is not an important enough factor to determine whether a one or a two-story building should be chosen. Here are the facts on the gymnasiums.

Two Examples

Building A is one-story for 1,230 students. Building B is two-story for 1,215 students. Both buildings are of the same type of construction and of similar materials throughout. They are built directly on the ground and are of sturdy, reinforced concrete. Both are in stabilized communities and are considered permanent.

Building A's construction contract for 17,400 square feet was \$235,300, while two-story building B was \$234,700 for 17,700 square feet. Thus A cost \$13.50 per square foot while B cost \$13.25 per square foot. The one-story building cost 2 percent more per square foot than did the two-story building.

But this is not the whole story on square foot costs. In the two-story building, the area devoted to halls and stairs is necessarily larger than that in the one-story building. If we call all the area that is not occupied by halls and stairs usable (and this term usable is only of limited application for this particular case) then the one-story building has a usable square foot cost of \$14.25, while the two-story building has a greater usable square foot cost of \$15.15. The two-story building costs 6 percent more per square foot than does the one-story one.

This can be shown in another way. In these two buildings of almost the same gross cost and almost the same gross area, the more efficient design of the one-story building allows it to contain an additional exercise room of 900 square feet within its slightly less gross area.

Cost of the land occupied must be considered before cost comparisons are dropped. Analysis shows that often cost of the land is not the determining factor it appears to be at first glance, but only

another argument for choosing the best building regardless of cost.

In Oakland, school land on the outskirts of the city was purchased last fall for \$4,000 per acre or 9¢ per square foot. Since the one-story building occupies 8,500 square feet more than the two-story building, the cost of enough land to compensate for this extra area is only about \$800. This raises the usable square foot cost of the cheaper one-story building by but 5¢.

We have also purchased improved residential property in a reasonably old part of the city at the rate of \$1.75 per square foot. Such a purchase would raise the usable square foot cost of the one-story building from \$14.25 to \$15.15, or exactly the cost of the two-story building.

These figures show that only in cases of very high property values will the cost of the land be a determining factor. They should give the designer courage to insist that the business manager and

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MODEL GS-192, HHS-192
GS-192, 14,650 lbs. G.V.W. HHS-192, 15,500 lbs. G.V.W. For 48 pupils.



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2 models—16,125 and 17,000 lbs. G.V.W. For 54 pupils.



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2 models—18,075 and 19,000 lbs. G.V.W. For 60 pupils.

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DODGE "Job-Rated" SCHOOL BUS CHASSIS

One or Two-Story School Buildings?

(Continued from page 13)

board buy more property when at all possible, if he has decided that a one-story building is best.

In the case of these two gymnasiums, one figure for usable cost per square foot has not varied from another by more than 6 percent. Surely a real study of the problem will develop other features of the two designs that must be worth more

than this 6 percent to the community in terms of long satisfaction.

For example, with a one-story building, one instructor can give a degree of supervision to the main gymnasium, the exercise room, and the play fields at the expense of only a few steps. (But on the other hand, any gymnasium caring for 1,200 boys and girls, with a maximum

class of about 120 for either sex, will demand more than one instructor; so ease of supervision may not be considered a determining factor.)

The two-story building with the gymnasium on the second floor allows that important room to be kept free of dirt. The two-story building usually has fewer entrances to control. Possibly the slope of the site may demand a two-story building; or a small site and the impossibility of expansion may lead to the

same conclusion. If the building is an addition to an existing school plan, the original buildings obviously determine the final decision.

Enough of gymnasiums! Let's now consider elementary schools. In California possibly more than in other states, particularly in our summer warm valleys, we have recently built many one-story schools. In general these are arranged so that all classrooms take most of their natural light from a north exposure with a full wall of glass. Almost always there are lowered high windows on the south to produce bilateral lighting, and often there are shielded skylights to give the school trilateral lighting.

The general plan is a finger arrangement of wings to produce courts between the wings, with low-ceilinged open corridors along the south walls of the wings. On the north side of each wing a wide door opens through the glass wall to an individual outdoor classroom for each indoor room. These outdoor spaces are probably the most attractive feature of this general scheme. Many think the ease with which a school of this arrangement may be expanded is a great point in its favor. Given the necessary land area, one wing after another may be added.

Plan Often Impossible

In many of our cities the plan is impossible. The sites are small and fixed. Streets on one to four sides of the lot, and the topography, determine the orientation. This makes north lighting of all rooms impossible, destroying the particular arguments for this arrangement.

Because of these difficulties, most cities continue to build the traditional type of schools—two stories, occasionally three—with unilateral lighting and double-sided corridors. I will now compare two elementary schools of these two separate schemes in the city of Oakland.

The Redwood Heights School is a two-story reinforced concrete building of 11 classrooms and all the necessary auxiliary rooms except a cafeteria. It is on a site of about 2½ acres. At 35 pupils per room, the school has a capacity of 385. Area of the building is 32,900 square feet, or 85 square feet per pupil. The building occupies 20,000 square feet of ground, or 52 square feet per pupil.

The Brookfield School is of the one-story finger scheme with size and facilities the same as for the Redwood school. It is on a site of 5.5 acres which will be increased as the school grows. The building area is practically the same—32,400 square feet, or 84 square feet per pupil. The wastefulness of the single-sided corridor in the finger scheme is apparently balanced by the extra area required for stair halls in the two-story buildings.

Ground Area Significant

The relative ground areas occupied by the two buildings are quite significant. While the two-story building occupies but 52 square feet of ground per pupil, the one-story building occupies 84 square feet, or 60 percent more. This is not the whole story. If the whole area occupied by the building is considered, including the attractive courts, that area is 51,800 square feet, or 135 square feet per pupil. That is about 2½ times the ground area per pupil consumed by the two-story building.

The two-story building occupies about 20 percent of its 2½ acre site. If the one-story building had been attempted on this site, it would have occupied 48 percent of the site.

These figures show how the site often

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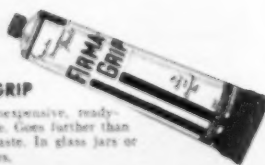
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determines the type of building that must be constructed. On a small site it seems idle to talk of the attractiveness and utility of the auxiliary classrooms.

If one must make a choice between a number of small, isolated play areas, usable only for quiet play during certain seasons of the year, and a reasonably large general playground where pupils may mingle with those from other rooms in many programs of supervised play, then the choice must always be for the larger single playground.

Many advantages that I cannot see must be found for using the one-story finger scheme on small sites before I would choose it over a modern, well-planned, and compact two-story building.

My conclusion that the general decision between the two types of schools should be made on some basis other than costs is based on studies I have made of our own and other schools. The actual cost comparisons on the Redwood Heights and Brookfield schools cannot be given since the Redwood school is practically complete, while bids were being taken on the one-story Brookfield school when this article was written.

For simplicity, the comparison here has been attempted only on buildings of equal quality. Comparisons of the two types are difficult because a two-story building must, due to codes and traditions, be of lasting construction. On the other hand, a one-story building, if it has adequate exits, may be cheapened and built of almost anything. There is also an urge to reduce facilities and auxiliary spaces and hope for their addition to the one-story types in the future. But I believe that if the two types of schools are of equal quality, though not necessarily of the same structural materials, the square foot costs will be so nearly equal that a choice must be based on other factors.

School Trains Projector Operators from Freshman Through Senior Classes

MARYSVILLE Union High School in Marysville, California, has solved its projector operation problem by creating a corps of specially trained student operators, reports Mariette Miller in the *California Journal of Secondary Education*.

An operators' corps composed of about 20 boys was started, using the stage crew class as the nucleus of the group. These boys were given a thorough training in the operation, maintenance, and care of projectors. At the end of the training period an oral examination and a practical demonstration were given, and licenses were issued to those who passed the tests. A captain and first and second lieutenants were chosen to organize the others. Five boys are now trained from each of the classes—freshman to senior.

The audio-visual director gives a schedule of the week's film program to the captain of the corps at the beginning of each week. The captain then assigns operators for each period scheduled. If an operator is enrolled in a class in which films are to be shown, he is assigned to duty during that period. When there is no operator in the class, an operator is assigned who has physical education for that period. The schedule is planned so that no one student will have to miss physical education often.

This system has proved to be highly satisfactory on several counts. The mechanical performance of film showings has been raised; the school is getting better service from its projectors; and teachers prefer being relieved of the responsibility of operating the projectors.

Art Class Works on Bank Decorating Project

THE excitement of working on a live project, later translated into actuality, was the lot of students of James H. Cullen, art director of the Ramapo, New York, school district. As the result of a talk given by Mr. Cullen, an officer of the Lafayette Bank & Trust Company approached the school with an art problem, reports the *Metropolitan School Study Council Exchange*.

For as long as the banker could remember the bank had been painted a buff color, and he was depressed at the thought of another coat of buff. He wanted something new and lively; yet it was difficult for him to visualize the bank painted a different color. He needed to see it before starting.

This was grist for the art students' mill. The wheels began to grind.

Mr. Cullen and his students visited the bank after hours. They considered all the factors involved in the problem: type of work done in the bank, effect of color on fatigue and morale, sources of natural and artificial light, colors of permanent accessories, and so forth.

Then all the students submitted a color scheme for the bank. The samples were reviewed by the class, which then selected five plans from the 75 they had prepared. (Turn page)

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Good school photos mean good public relations.

Cutting Expenses On School Photos

How to maintain adequate records complete with good student photographs, at the same time securing clear-cut photos for the school yearbook, is best answered today by commercial photographers specializing in school photography.

Typical example is White Rose Studios, Mendota, Ill., member of the Photographic Association of America. Schools contacted by White Rose are offered free of charge two sets of prints (any size desired) of every student photographed, one for records and one for the yearbook. Not only are such prints furnished free, a liberal allowance is given the school for every student photographed.

Such offers are not philanthropy on the part of White Rose, according to H. W. White, firm president. It is made possible by use of superior equipment, photographers who can bring "studio quality" to their work, so that children and parents will want to buy what they see in finished results.

Shortly after school pictures are taken, White Rose sends to the school a complete portrait set for every student. Each set contains one 8 x 10 flesh-tinted portrait (fully retouched) and nine wallet-size photos. The entire set can be purchased by the child or parent for \$1.50, keeping all, part or none of the photos, as they choose.

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Art Class Project

(Continued from page 15)

Meanwhile four students had prepared perspective drawings. They included all the permanent accessories of the bank, and colored them from samples made when they visited the bank. When the final color schemes were selected by the class, the students completed their project by coloring each of the perspective drawings with one of the decorating

schemes and mounting it for display. The completed plans were then submitted to the bank, along with written considerations and recommendations.

The students' number one choice was the bank's final selection, too.

During this project the teacher remained in the background, except when he was called upon as an adviser or a coordinator of activities. One color scheme he particularly fancied was not submitted by anyone, but he gamely with-

held his grief from the students. He was in accord with the student choices from the plans submitted. The teacher feels this was a good democratic experience, and that in working toward a common goal the students disciplined themselves to accepting others' opinions.

Postscript to the story is that the completed job was so satisfying to the bank that the students are presently scheming up plans for a contemplated annex.

Students Serve as Publishers for a Day

By BESS GREENLEY
Journalism Instructor,
Oelwein, Iowa, High School

Condensed from Midland Schools

LAST year marked the 18th annual publication of one day's edition of our daily newspaper, *The Oelwein Daily Register*, by our high-school journalism class. The practical value of the project to the students of journalism has been so well proven, we hope to continue it as long as *The Register* will hand over its city room to us once a year.

Our journalism students contribute news and feature stories to a weekly school page in *The Register* the year round, but taking over the whole paper one day a year is something different. I recommend the project to journalism teachers lucky enough to live in a community where they can win the cooperation of a newspaper in working out the undertaking.

The experience is tremendously valuable to the boys and girls. They've actually gotten out a newspaper. They've covered their beats from the fanciest society tea in town to the police station. They've met their deadlines, knocked out their headlines, and heard the presses roll.

Here's How It's Done

For those journalism teachers who can wangle a newspaper into this truly public-spirited cooperation, an account of how Oelwein has worked out the project may be helpful.

If I have given the impression that we move in only on the editorial business of the newspaper, let me correct it right now. Once a year our journalism students get out the whole paper, including everything from the weather report to the advertising. They deliver all copy to the mouths of the presses. For obvious reasons, the running of the machines cannot be handed over to the students.

Making up and selling ads for the special edition begins about a month before the paper is published. The advertising director and business manager attend two of the regular business meetings of the school staff, and instruct them in the preparation of ads and in the art of selling them. Each of the 21 members of the *School Register* is assigned prospects, and it is his job to deliver his quota of advertising. Money received for those ads is on a commission basis, and is the high-school staff's only income for the year.

We appoint a student business manager who checks in all ads, and turns in a financial report on the big day when he sits at the business manager's desk in the real newspaper office.

Completely Student Run

Student news editors take over the telephone machines, assist in clipping, editing, and writing heads for the front page news stories. A student city editor assigns his staff members to their various beats around town. An "Enquiring Reporter" gets out on the street and queries the public. Our society editor brings the social calendar up to date, sends an assistant to cover a wedding, dashes off to a club meeting.

Other students do rewrite, edit copy, take feature and emergency assignments from the city editor.

The job is not over when the paper goes to press. The papers still have to be folded, mailed, and stacked for the car routes.

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Why Do They Leave School Early?

CHILDREN may not be fleeing the schools in droves. But they are leaving in large enough numbers to pose a serious problem for the schools. Only about one-half of the 1,700,000 students who entered the ninth grade of high school last fall will remain to graduate four years from now, according to a study recently published by the National Child Labor Committee, *Early School Leavers—A Major Educational Problem*, a study by Harold J. Dillon, attempts to discover causes of school leaving and warning signs of vulnerability to it as a basis for determining the measures schools can take to increase their holding power.

One of the first facts that came to light in the study was the incompleteness of school records. The only thing that could be found out for the total group of 1,360 school leavers was whether they were boys or girls. Other pertinent facts which might indicate vulnerability to school leaving were often left out.

Many Leave Before Tenth Grade

Some of the findings gleaned from the records include the fact that potential school leavers are characterized by regression in attendance and scholarship as they advance in school, that the majority are grade repeaters, that they have frequent transfers, and that not more than one-quarter participate in extracurricular activities. The great majority leave prior to completing the tenth grade.

Intelligence ratings from school records show 40 percent to be normal or above normal, while nearly 20 percent have I.Q.'s generally recognized as adequate for post high-school education.

Important facts were also garnered from many interviews with the school leavers. Of the motives they had for leaving school, the largest group gave reasons relating to school as the primary cause, while the second largest group gave economic reasons. Most of the school leavers, according to the report, make their decisions to leave school and find jobs without consulting anybody in school. Frequent comments were that "nobody in school was interested" and they had "nobody to turn to for advice or help." About half the leavers regretted having left school, and about half did not.

Recommendations Are Given

Many specific recommendations are outlined and amplified in the final chapter of the report. These emphasize the need for better knowledge and understanding of individual students, since evidence pointed to this as the basic problem in school leaving.

The study is based on information gained in five communities, selected because they contained representative cross sections of the population and their schools offered full cooperation. Findings are based on three sources of information:

1. A personal interview with each of the young people to obtain the real reasons for his leaving school, his evaluation of his school experience, and his subsequent work history.

2. All available facts from the school records.

3. Appraisal of each person's characteristics by two or three teachers who knew him before he left school.

The study may be obtained for \$1.25 per copy from the National Child Labor Committee, 419 Fourth Avenue, New York 16, New York.

Let's Lessen Those Speech Handicaps

A CHILD with a speech defect is frequently held back a full grade in grammar school by personal and social maladjustments stemming from his handicap, noted Dr. Wendell Johnson, one of the outstanding authorities in this field, in a recent issue of *The Crippled Child*. Speech handicaps reduce the earning power of an adult by approximately 25 per-

cent, and yet only 10 percent of those with speech handicaps are receiving the training and treatment necessary for their improvement.

Two things contribute to this state of affairs. There is an acute shortage of qualified speech correctionists to train the six to nine million persons who have speech defects. And there is "urgent need for more extensive scientific investigation of speech disorders, their causes and aggravating conditions, and effective meth-

ods of prevention and treatment," said Dr. Johnson.

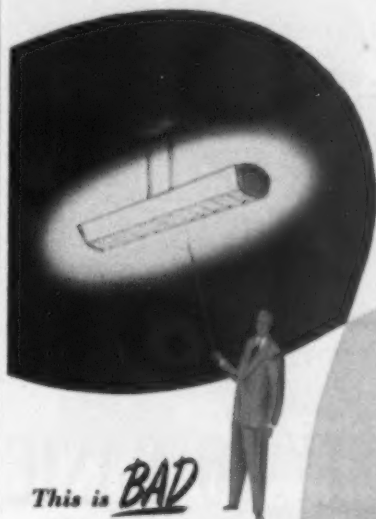
To meet these needs for trained personnel and extensive research, a Speech Correction Fund is being sponsored jointly by the National Society for Crippled Children and the American Speech and Hearing Association. Money spent for research will result in better trained workers, equipped with more knowledge and improved methods of correction.

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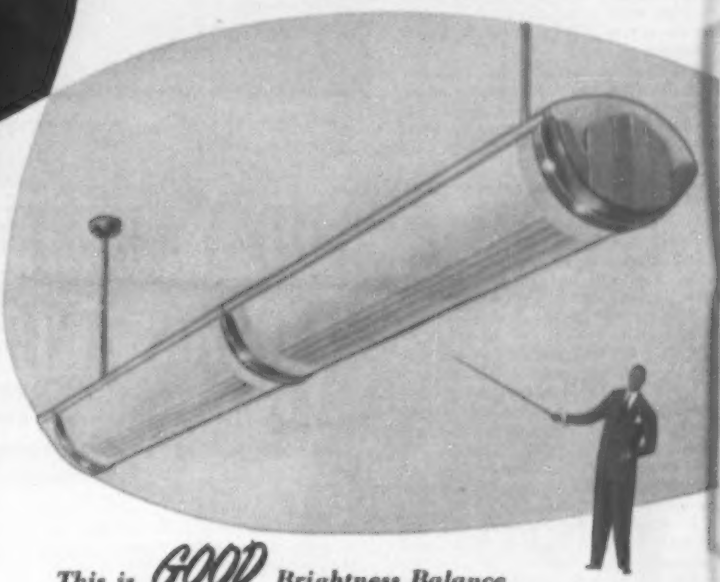
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SCHOOL LUNCHROOM DEPARTMENT



By MARY FARNAM
Editor, School Management's School Lunch and Cafeteria Department, and Director of School Cafeterias, Cleveland Heights

WITH Spring at hand it is time to inject a little spring tonic into our menus. Sometimes we become so involved in our everyday routine that, barring any jolting criticisms, we unconsciously let our menus and the food served fall into the doldrums. Because of the necessity for a low selling price, we are somewhat restricted. But

imagination and a little experimentation in using what we already have can perk up our menus, as well as our food, and boost our sales.

It is true the youngsters like tried and true favorites, but even these can be overdone. I believe that no menu or item should be repeated on the same day each week, except such staples as milk, ice cream, juices, and the like.

As a background, use the seven basic food groups needed each day:

1. Oranges, tomatoes, grapefruit, raw cabbage, or raw greens—one serving.
2. Potatoes—one or more servings.
- Other vegetables and fruits—two servings.

3. Green and yellow vegetables—one large serving.

4. Milk and milk products, as a beverage and in cooked foods—one quart.

5. Meat, poultry, fish, eggs, dried beans, peas, nuts, or peanut butter—one serving meat, poultry or fish, and at least four eggs a week.

6. Bread, flour, and cereals (enriched or whole grain)—two slices of bread or its equivalent each day.

7. Butter and fortified margarine with added vitamin A—two to three level tablespoons.

You should make your menu selections from these groups. Then make your menus sparkle with variety, while serving good food in nutritional balance.

Perhaps you have a master menu plan. Good, but keep in mind the seven basic food groups needed each day and interchange the items on your menu keeping the nutrition value equal. If you have manager-cooks in any or some of your schools, advise them of nutritionally equal substitutions. A chart of food of interchangeable values or a footnote on the weekly menus will guide them in making substitutions when necessary.

Basic recipes are important in maintaining a high standard of food production and uniform finished products. A good basic recipe becomes a different recipe by the substitution of one or more ingredients, or by the addition of other ingredients. Such variations relieve monotony.

Add variety to the basic foods by varying shape, texture, size, temperature, flavor, and color.

Shape

Vary round meat balls by adding rice and making "porcupines." Instead of balls



One basic cake and frosting recipe was used to produce this tempting array

ADD VARIETY TO BASIC FOODS AND RECIPES

A little imagination and experimentation go a long way in perking up spring menus

make oval individual rolls. Instead of the standard hamburger make a larger sized Salisbury steak. Instead of plain meat loaf make it with hard-boiled eggs in the center; or make a ribbon pattern with dressing or vegetables.

Instead of serving plain hard cooked eggs, halve, quarter, or chop them. Separate yolks and whites, and chop or sieve them.

Vary gelatin desserts or salads by serving cubed, squared (thick or thin), whipped, layered, or in individual ring molds.

Serve bread in regular slices, or in triangular and finger strips.

Serve vegetables natural shape, diced, slivered French cut, lattice cut, shoestring, or shredded.

Serve fruits natural shape, sliced, quartered, chopped, crushed, or puréed.

Make cake in loaves, double or single layer, or cup cakes. Vary the shapes of individual pieces. (See illustration).

Texture

Apples can be raw, stewed, or sieved.

Bread can be plain, toasted, crumbed, croutoned, and cooked in dressing or bread puddings.

Vegetables such as carrots, celery, cauliflower, and spinach can be raw or cooked.

Soups can be clear or cream, with vegetables added to either occasionally.

Size

Make two smaller meat balls instead of one large one; make two cookies instead of one larger cookie.

Temperature

You can serve either hot or cold such items as deviled eggs, potato salad, tomato and other juices, vegetables, and pineapple sliced or wedged. Milk, too, can be served cold or in hot cocoa.

Flavor

Vanilla and chocolate are not the only flavors for cream puddings. Try orange, butterscotch, lemon, and strawberry occasionally.

Use the extra juices from canned or cooked vegetables and fruits in gelatin salads and desserts.

Color

Take it easy here, too, since nature's colors are best. But try for appetizing contrast.

Give overworked parsley and maraschino cherries a rest. Use other garnishes occasionally.

For variations in methods of serving try different sizes and types of dishes for the same food. In the picture are shown

plain white and green glass plates and the regular patterned china plates. Our dish pattern is a soft green on a white background. The cup cakes are served in sauce dishes, plates, or displayed for sale in their baking cups arranged in baskets or on large glass platters.

Cup cakes are especially popular on our cold food lines as they can be eaten without using a fork or spoon. In elementary schools small sized cake squares are served in sauce dishes, as many children seem to be able to manage better when eating with a teaspoon from a sauce dish than with a fork from a plate.

We serve soup in cups and in bowls. The cup service is by far the most popular. I doubt this preference is entirely due to the lower price, either. Fruit juices are served in regulation 5-ounce glasses. Sometimes for a change fruit punches are sold in water sized glasses.

Hot foods can be served in various ways. Meat or vegetable loaves are usually sliced. Try serving thinner slices instead of one thick slice. Croquettes can be balls, patties, cutlets, or cone-shaped. For economy as well as to give a larger and more filling serving, add dressing, either as a slice under the meat or as a ball or cone topping the slice. Instead of serving plain "hot dogs" serve a wiener with sauerkraut, hot potato salad, or some other vegetable combination.

Meat pie can be served with biscuit, pastry, mashed sweet or white potato topping, marked off in squares in the food table pan, served in individual ramekins, or cut-out biscuit tops. Individual earthenware meat pie dishes can be preheated. The hot meat pie can be ladled into the dishes and the tops put on just as served. The top of a five-pound baking powder can cuts a circle just the right size. Cut and bake these tops ahead and assemble them as needed. This prevents a soggy top.

Brown gravy, well made and served piping hot, is a favorite of school children. But try adding vegetables for use on the meat loaf, croquettes, or any kind of meat. Tomato, barbecue, or Spanish sauce are good for variety. Raisin sauce goes well with ham or pork. Cream of white sauce can be varied by adding crumbled crisp bacon, cheese chopped or grated, horse-radish, mustard and paprika combined and used sparingly. Mushrooms, finely chopped parsley, pimento, or sweet red or green peppers can also be used.

Vegetables can be served in various ways. Spinach looks much more appetizing when served with a fork than with a spoon or scoop. Mashed vegetables and baked dishes such as macaroni and cheese look better if served with a spoon instead of the round scoop. (Try a cone-shaped scoop, too. Your serving women can be trained to measure the right sized portions with a little experience and help.) When tomatoes and green peppers are high priced try using baked apples or baked potatoes with pork sausage filling. Macaroni and cheese taste good when baked in individual custard cups. These molds can also be served with a sauce.

Toasted cheese sandwiches are an old



El. J. Flaine photo

If your young customers have a habit of passing up nutrition-packed custards, try the trick pictured above. Add plump, plump raisins to a basic vanilla custard, then top each cup with crunchy toasted all-bran. Served brown and bubbling right from the oven, this tasty dessert will win many friends

stand-by. But try ham, chicken salad, or even ground beef toasted sandwiches. Hot meat loaf sandwiches are a good change from the regular hamburger. "Sloppy Joes" or loose hamburger spooned on the bun or bread are favorites, too. If served on bread a topping of good hot brown gravy adds a lot.

Spring is the time to make the salad counter sing with appetite-whetting combinations. There are unlimited possibilities. A popular plate combination holds two or three different kinds of small salads with a small sandwich; another is a single salad of fruit or vegetable, with three wedge-shaped sandwiches, each with a different filling. Sometimes the sandwiches are half sized triangular pieces of bread spread open face. A few potato chips, pickle chips, radishes, or an olive add variety for shape, color, size, texture, and flavor. Individual molded gelatin rings with a filling and sandwiches is a favorite plate any day. Use meat or fish salads and sandwiches, as well as vegetable and fruit. The combinations are endless.

In gelatin salads and desserts vary the appearance and taste by using the right combination of vegetables or fruits that float or sink. For example, apricots and grapes will sink; bananas and apples will float. If not too many of each is added there will be a layer of plain gelatin between.

One large-quantity recipe service gives the following list:

Fruits that Sink

Apricots, canned, frozen
Cherries, maraschino, canned
Cherries, Royal Anne, canned
Cherries, Bing, frozen
Fruit cocktail, canned (check individual fruits)
Grapefruit and orange sections, canned
Grapefruit sections, canned
Grapes, canned, fresh, frozen
Peaches, canned, frozen
Pears, canned
Pineapple, canned, frozen*
Plums, canned, frozen
Prunes, dried, cooked
Raisins, dried, seedless
Raspberries, canned, frozen

*Frozen pineapple must be cooked before adding to gelatin mixture.

Fruits that Float

Apricots, fresh, quartered
Apples, fresh, diced or sliced
Bananas, sliced
Blueberries, canned, frozen, fresh
Cantaloupe, cubed
Grapefruit sections, fresh, frozen
Honeydew melon, cubed
Orange sections, fresh
Peaches, fresh, sliced
Pears, fresh, sliced
Plums, fresh, sliced
Raspberries, fresh
Strawberries, fresh, halved

A few fruits may sink or swim in gelatin. These are frozen red sour cherries, strawberries, and cubed apples; and fresh, pitted Bing cherries.

Last fall at our high school we made a survey of the food likes and dislikes. Two homerooms from each grade were surveyed to give an impartial cross section of the school. One of the interesting requests was for a "whole luncheon salad plate and charge more for it." Since then we have a selection of these

plates each day during the lunch hour.

We serve our salad dressings in glass bowls or cruets and let each one serve himself. Standard are mayonnaise, French, and cooked dressing. From the mayonnaise we make tartare sauce, Thousand Island, and Russian dressing. From French dressing we make garlic and chiffonade. Other dressings, not so popular with youngsters but which do have a place for variety, are sour cream dressing, hot bacon dressing, fruit dress-

ing, and whipped cream dressing. We mix the dressing with the other basic ingredients for slaw and for Waldorf salad.

Last but not least come desserts. The picture at the beginning of the article shows some of the ways in which the same basic cake recipe and basic chocolate frosting can be utilized to add variety. Two-layer cakes are perhaps the most popular, but they take the most time to prepare and give addi-

For more facts use Inquiry Card, RM-15K

Here's A Soup Service

THAT SOLVES EVERY SOUP PROBLEM!



FLAVOR!

VARIETY!

SPEED!

CONVENIENCE!

- 1 Heinz Soups are made from the world's choicest ingredients, combined with homelike care and skill to produce the delicious flavors your customers go for!
- 2 Every one of the 12 kinds of Heinz Soups packed in 51-oz. tins has been carefully selected. According to a survey these 12 Heinz Varieties cover approximately 90% of the demand.
- 3 Heinz Soups in 51-oz. tins are easy to prepare and are ideal for fast, labor-saving service.
- 4 Heinz Soups in 51-oz. tins provide maximum convenience and enable you to serve without waste more kinds of soup than would otherwise be possible in the same space.

12 KINDS OF HEINZ SOUPS IN 51-OZ. TINS—

Cream of Tomato • Bean Soup • Split Pea • Genuine Turtle • Cream of Green Pea Soup • Vegetable without Meat • Vegetable • Beef Noodle • Beef with Vegetable • Chicken Noodle • Chicken with Rice • Clam Chowder • Alao Cream of Mushroom Soup in 29-oz. fls.

• Write for FREE recipe book, "Quality Recipes Using Heinz Condensed Soups." Address Hotel and Restaurant Division, H. J. Heinz Company, Pittsburgh 30, Pa.

ASK YOUR HEINZ MAN ABOUT

HEINZ condensed SOUPS

Also compare advantages of other quality Heinz products such as Heinz Tomato Juice, Heinz Oven-Baked Beans and Heinz 57 Solid Broccoli.



Add Variety to Basic Foods

(Continued from page 19)

tional work in washing the pans. For economy as well as variety, a single-layer cake is good. Sometimes sprinkle powdered sugar on top, or add chocolate sauce. The pie-shaped piece may be split and filled with custard and topped with frosting. If equipment is limited use loaf pans very satisfactorily, and slice the cake. Cup cakes, baked in paper cups,

can be sold for a lower price, and fill a special service on the cold counter.

Sheet cakes cut in squares are best for large quantity production with the least amount of work in preparation and cleaning up. The size of the square can be cut to fit the food cost. For special parties these same sheet cakes can be cut in very small oblongs or squares,

and individually decorated on each piece.

I believe that no "leftover" food should be served the second time in the same way. Any cake not used one day can be reconstructed the next day in one of several ways. One is to cut the square through the middle, insert a piece of ice cream and put the frosting side down as the top layer. Chocolate sauce topping is a favorite for this one. Soft custard sauce can be used instead of the ice cream. Another favorite is icebox

cake. It is made from day-old cake and custard sauce, stored in the refrigerator overnight, and served with a sauce the next day. For cakes having a vanilla frosting add cherries or other fruit for next day's use.

Pies can be varied, too. Make deep dish apple pie in sheet cake pans with a single crust, and cut in squares. Serve plain, or with hot lemon or vanilla sauce, or with plain or whipped cream. Cream pies can be reconstructed into "icebox" puddings. Puddings can be served in custard cups with a meringue top. Well seasoned applesauce can be dished into sauce dishes and topped with a previously baked pastry circle. This gives a smaller sized portion with an accompanying lower food cost for the dessert.

Almost any good basic food or recipe can be varied by the wise use of a little imagination mixed with good sense. The result is an interesting menu and food counter. It will keep your youngsters coming back day after day with nary a complaint that every day you serve just the same old thing. Cowper wrote that "Variety is the very spice of life." We can say, "Variety is the basis of our good food service."

The following materials will help you in planning for variety in your basic recipes:

School Meals. School Food Service Association. May be secured from Miss Constance C. Hart, director of Nutrition, Board of Education, Rochester, New York. 160 pages. \$2.50.

Handbook of Food Preparation. American Home Economics Association, 700 Victor Building, Washington, D. C. 47 pages. 50¢.

Quantity Recipes Using Nonfat Dry Milk Solids. Bulletin 503. American Dry Milk Institute, 221 North La Salle St., Chicago, Illinois. 64 pages. Free.

Yeast and Quick Breads for the School Lunch. Bureau of Human Nutrition and Home Economics in co-operation with Production and Marketing Administration. Available from Superintendent of Documents, Washington, D. C. 37 Pages. Free.

For more facts use Inquiry Card, 88M-16K



When youth must be served use KYS-ITE!

High spirits . . . horseplay . . . jostling—typical school cafeteria. But schools that use KYS-ITE Trays and Tableware don't worry.

KYS-ITE, the different kind of plastic, can "take it." KYS-ITE is almost unbreakable . . . won't shatter . . . tough to chip or crack. Quieter, too . . . never clashes or clatters. And easier to handle and keep clean. KYS-ITE's colorful beauty won't fade when sterilized in boiling water or washed with regular dishwashing compounds. Its color is part of the plastic itself . . . not just a surface finish.

KYS-ITE offers a range of round and rectangular serving trays—also the famous KYS-ITE "Meal-in-One" Plate. This 3-partition plate holds a meal plus beverage yet is so light a small child carries it easily.

Your wholesaler can supply you. Or mail coupon today.

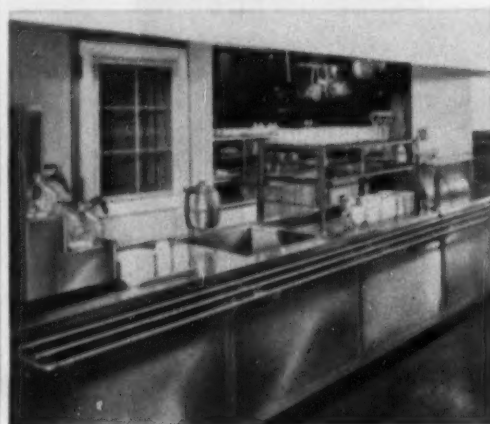


KEYES
FIBRE COMPANY, Dept. M-4,
420 Lexington Ave., New York 17, N. Y.
Please send us information on
KYS-ITE Tableware ☐ KYS-ITE Trays ☐

NAME _____
TITLE _____
NAME OF SCHOOL _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____

For more facts use Inquiry Card, 88M-17K

For better food and quicker service in your cafeteria...



choose equipment by

It's easier, more economical to serve good nourishing meals every day—with equipment by PIX. Let PIX en-

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gineers and craftsmen apply their long experience in the school, institutional and industrial fields to your feeding problems. Whatever your requirements, a cafeteria engineered, built and installed by PIX gives you the facilities for serving better meals more efficiently and at lower cost.

Make yours another of the hundreds of outstanding cafeterias by PIX. Send your problem to Dept. W.

ALBERT PICK CO., INC.
3159 PERSHING ROAD, CHICAGO 8

Photo Awards Closing Date

CLOSING date for this year's National High School Photographic Awards is midnight April 14. All entries postmarked by that hour will be considered for awards. The judging will take place in May; and since winners will be notified immediately thereafter by mail, it is expected that the outcome of the competition will be generally known before the end of the school year. A catalog listing all winners will be sent to all entrants after the conclusion of the contest.

Judges for this year's contest include Cyrus K. Eaton, nationally known photographer and director of the photography department at the Art Center School in Los Angeles; Dr. Joseph M. Murphy, director of the Columbia University Scholastic Press Association; and Kenneth W. Williams, manager of the photographic illustrations division of the Eastman Kodak Company.

The contest is open to boys and girls attending any of the high-school grades from the ninth to the twelfth inclusive. Four classes of entry—covering school life, fine arts, sports, and everyday life—permit submission of practically any type of picture taken by students. Prizes range from \$5 to \$500, and a student may win as much as \$600 with one snapshot.

To submit entries students should first procure an entry blank and rules folder. These may be obtained from high schools, camera dealers, or by writing direct to National High School Photographic Awards, 343 State St., Rochester 4, N. Y.

NEW CAFETERIA EQUIPMENT

Use the SCHOOL MANAGEMENT coupon on Page 23 or the Inquiry Card between pages 22-23. Indicate very carefully the item on which you wish to receive further information.

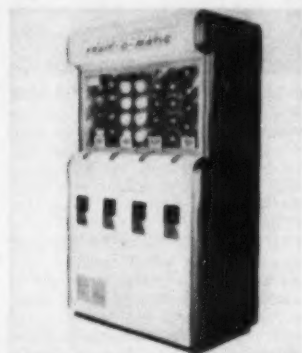


Electric Range SM-436K
Lunchrooms that need to conserve space or require a range for counter use will welcome this new electric model, No. 436-56. It can be mounted on cabinet or counter, and is particularly adaptable where built-in cooking facilities are contemplated.

Range has cook top at side of the oven. It has 7 heat switches, pilot light on burners, and appliance receptacle. There are fully automatic electric controls for time and temperature. Range comes in both stainless steel and regular finish. . . Use the Inquiry Card or write to Associated Products, Inc. Dept. SM-436K, 20 So. Ontario St. Toledo, O.



Garbage Can Enclosures SM-435K
It's easy to keep dogs, cats, rodents, and insects away from garbage when you use a new Bennett Bilt garbage can enclosure. These heavy-duty steel units are designed for outdoor storage of two garbage cans of up to 30-gallon size each. They have two deposit doors which swing open and closed on full-length, piano-type hinges. Slanting aprons, an integral part of the enclosure cover, funnel the garbage into the cans. Each can slides in and out on two runners which protect and reinforce the bottom of the unit. Large stainless steel feet eliminate rusting. . . Use the Inquiry Card or write to the Bennett Manufacturing Company, Dept. SM-435K, Alden, New York.



Fruit Vending Machine SM-437K
Cool, crisp, healthgiving fruit is dispensed by the Fruit-O-Matic, fully au-

tomatic refrigerated fruit vending machine. It holds 200 pieces of fruit—apples, oranges, peaches, pears, and other types of merchandise. Four separate conveyor belts provide for selectivity.

Machine is easily loaded. It is over 6 feet tall, 45 inches wide, 24 inches deep. In a successful trial period of field operation, there was not a single case of breakdown or failure due to faulty design or production. . . Use the Inquiry Card or write to the Fruit-O-

Matic Manufacturing Company, Dept. SM-437K, 5225 Wilshire Boulevard, Los Angeles 36, California.

Tapioca Recipe Cards SM-438K
Handy new quantity recipe cards for tapioca dishes are available. Included are recipes for cheese soufflé, blueberry tarts, chop suey, orange tapioca pudding, pearl tapioca pudding, cherry pie, and chicken soup. There is space for cost records on the reverse side of the cards. Also listed

are the general uses of the five types of Morningstar brand tapioca—small and large pearls, small and large granules, and tapioca flour. . . Use the Inquiry Card or write to Morningstar, Nicol, Inc. Dept. SM-438K, 1770 Canalport Ave. Chicago 16, Illinois.

Temperature Booster Unit SM-442K
You can have plenty of rinse water at the needed 180 degrees with a new, compact electric booster unit. It provides

For more facts use Inquiry Card, SM-18K

FREEZING CAPTURES STUDENTS' FANCY



Home economics students throughout the country seek instruction in newest method of food preservation and storage—home freezing

That's why teaching the ease of use and the advantages of the modern home freezer has become a "must" in leading schools throughout the country. Such instruction includes home freezing and storage of both fresh and cooked foods.

This advancement in home economics teaching is due to the fact that about two million American families now have freezers. To keep up with the times, the school home economics curriculum must include courses in the use of this equipment that makes fresh foods available in the home the year 'round, regardless of season.

No special wiring

Schools have welcomed this

addition to their home economics installations, not only because parents and pupils alike are pleased and benefited, but because installation presents no problem. No special wiring is required for an Electric Freezer. It may be located wherever most convenient, and simply plugged into an ordinary electric outlet.

Home economics teachers, members of school boards, and other school officials may get complete information about this appliance that is now a "must" in every home economics department, from local electric service companies, appliance sales organizations, or by writing to the manufacturers.



Informative Booklet Offered FREE!

To help in the teaching of home freezing, a 28-page booklet—"How to Enjoy Better Meals with Less Work at Lower Cost"—is offered. This is a complete and comprehensive piece of literature, profusely illustrated, covering every phase of the modern Home Freezer and its uses. Includes fruit and vegetable freezing charts. No home economics teacher will want to be without this extremely helpful booklet, offered absolutely FREE. Use coupon!

WHAT IS A FARM & HOME FREEZER?

"An Electric Farm and Home Freezer is the household type of low-temperature, mechanically refrigerated cabinet used exclusively for the freezing and/or storage of frozen foods."

It is in no sense a substitute for the conventional household refrigerator.

Of course, it's **ELECTRIC!**

FARM & HOME FREEZER SECTION

National Electrical Manufacturers Association

ADMIRAL • BSH-HUB • BISHOP
COOLERATOR • CROSLY • DEEPLYFREE
FRIGIDAIRE • GENERAL ELECTRIC
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INTERNATIONAL HARVESTER
KELYNATOR • MORSE • SANTARY
SCHAFFER • SEIGER • STERNBERG
SUB-ZERO • WESTINGHOUSE • WHITING

Mail this for FREE booklet!

FARM & HOME FREEZER SECTION
National Electrical Manufacturers Association
155 East 44th Street, Dept. SM-4
New York 17, N. Y.

Please send me, absolutely FREE, copy of "How to Enjoy Better Meals with Less Work at Lower Cost."

YOUR NAME

NAME OF SCHOOL

STREET & NO.

CITY, STATE & ZIP

New Cafeteria Equipment

(Continued from page 21)

35 to 40-degree water temperature rise in a one-minute cycle. Heater unit rating is 5,000 watts for 230-volt operation. This thermostatically controlled device is for small and medium-size dishwashing machines. It can be built as part of a new Universal machine, or can be installed for use on present equipment. . . Use the Inquiry Card or write to Uni-

versal Dishwashing Machinery Company, Dept. SM-442K, Nutley, New Jersey.

Knife Grinder

SM-439K

You can have exactly the edge you need on any knife with the new Zumat commercial knife grinder. This precision machine has a simple adjustment. Set

it "low" for a silver steak-knife edge; "medium" for a sharp, sturdy edge for boning or average utility use; and "high" for a slender high-ground edge. Both sides of the knife are ground at a single pass through the machine. Grinder has a sealed-in transmission unit. It is driven by a 1/3 hp General Electric heavy-duty motor. . . Use the Inquiry Card or write to the Zumat Manufacturing Company, Dept. SM-439K, P. O. Box 1245, Milwaukee 1, Wisconsin.

For more facts use Inquiry Card, SM-19K

...ONE OF THE BEST WAYS TO LOWER OPERATION COSTS—

is to eliminate unnecessary food waste by serving meals that are consistently flavorful. Today hundreds of institutions are depending upon economical Maggi's Granulated Bouillon Cubes to bring new appetizing goodness to their soups, stews, gravies and the many other dishes that call for meat stock. Try adding several tablespoons of this flavor-rich Maggi's Granulated Bouillon to all your everyday recipes—also remember, it makes a delicious instant-quick "broth".

2 OTHER MAGGI FLAVOR FAVORITES

★ Maggi's Seasoning

★ Maggi's Gravy Powder, Chef Style

BRINGS FLAVOR TO BUDGET MENUS!



MAGGI'S
Granulated
BOUILLON CUBES



The Nestlé Company, Inc., 155 East 44th St., New York 17, N. Y.

For more facts use Inquiry Card, SM-20K



Equipment & Supplies for Places where People Eat, Sleep, Drink or Play

Those brief cases are fact-packed with all the items we handle for hotels, restaurants, resorts, bars, fountains, schools and various other institutions . . . ranges, mops, pots and pans . . . linens, glasses, stools, ash cans . . . in fact, just about EVERYTHING you use. The DON salesman brings you top values and keeps you informed of what's new in equipment and supplies.

When it's DON—it's done! Virtually every order is handled within 24 hours. Every item is sold on a guarantee of satisfaction or money back.

Give your orders to the DON salesman, write, or—in Chicago, phone CALumet 5-1300.

EDWARD DON & COMPANY

Dept. 20 • 3301 S. LaSalle • Chicago • Ph. CA 5-1300

For more facts use Inquiry Card, SM-21K

DEPENDABLE FLOOR BRUSHES

backed by 35 years of experience



Select materials and expert workmanship are combined in Flour City Floor brushes. Available in widths from 12" to 42". Flour City brushes sweep clean and wear longer. Filled with fibre, hair, nylon or Chinese bristles.

WASHABLE FLOOR AND DUST MOPS

Made of highest quality mop yarn attached to a hardwood block, Flour City floor and dust mops are designed for economical, faster cleaning. The mop can be quickly and easily removed for washing or replacement.



FLOUR CITY BRUSH CO. Minneapolis 15, Minn.
PACIFIC COAST BRUSH CO. Los Angeles 21, Calif.



Plastic Tableware

SM-441K

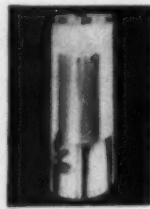
Do you have breakage, chipping, washing problems? Start using Kys-ite tableware and see them depart. With average use, this tableware is practically indestructible and stubbornly withstands breaking or chipping. The high-gloss surface is extremely resistant to scratching, cutting, and cracking. Washing Kys-ite smooth, contoured surfaces is easy. Any reputable detergent may be used on them and they can be sterilized as often as needed without injury. The clear-through color can't wear off.

Of all the handsome, maple-color pieces of tableware used in schools, the 3-partition plate which carries a full meal is especially useful. The colorful serving trays come in many sizes. . . Use the Inquiry Card or write to Keyes Fibre Company, Dept. SM-441K, 420 Lexington Ave. New York 17, N. Y.

Juice Dispenser

SM-444K

All types of beautiful juices can be served by the new-type Ihle juice dispenser. It is especially good for frozen orange juice concentrate. Transparent "frosted plastic" gives the dispenser a tall cool look and provides for perfect visibility of the juice. There is a choice of mechanical or manual



agitation. This unit utilizes an "ice jacket" principle of operation of driving cold through the thin walls of the juice chamber. It is only 8 inches in width, yet has a capacity of nearly 2 gallons. . . Use the Inquiry Card or write to the Ihle Manufacturing Company, Dept. SM-444K, 1414 South Central Ave. Glendale 4, California.



School China Patterns

SM-443K

Schools can achieve a more homelike atmosphere in their lunchrooms by using the colorful new Syracuse China patterns in the Winthrop shape. Patterns include central floral designs with solid-color borders and all-over flower and leaf motifs.

This new shape has a "bridge-type" body construction which combines light appearance with exceptional strength. It is highly resistant to mechanical shock, heat, and pressure, and has the long life of vitrified china. There is a choice of three cup design. . . Use the Inquiry Card or write to Onondaga Pottery Company, Dept. SM-443K, 1858 West Fayette St. Syracuse, New York.

When Custodians Protect Themselves They Protect Others

CUSTODIANS are being constantly told to conduct their jobs and to behave in such a manner as will insure the safety of the pupils and teachers in their schools. But little is told them about working safely for their own sakes. Bud Snyder, safety engineer of the engineering extension service of Iowa State College, has this to say on the subject, reports the *Iowa Custodian News Letter*.

Actually, custodians are the important ones to consider, when personal safety is concerned. Some real thought given to conducting themselves safely at all times can teach safe working habits which will protect the youngsters as well.

Never relax safety habits just because there are fewer people than usual around. Never ease up on safety. Though there are fewer people around to get hurt through neglect, there are fewer people to help should an accident occur.

Check Hazards

Go over your buildings and make a list of existing hazards, then see that they are corrected. Don't wait for accidents to happen. Check on:

- Weak picture hangings.
- Cracked step treads.
- Temporary wiring.
- Open flues or pipes.
- Stairways without rails.
- Unlighted or dimly lit stairways, halls, or closets.

- Shower rooms without handrails.

- Marble stairs without safety guards.

The biggest single accident that can occur in a building is a fire. If this should come during a holiday season, it is particularly bad since it could get a head start before being discovered. Be especially careful always to place wet, oily, or paint-covered rags in a safe place. When painting, make sure that the paint is well covered and stored in an open, airy place overnight. Keep closets free of trash and rags. Don't use the wastebaskets in the rooms you enter unless you check and empty them when you are through working in those rooms.

Seven Suggestions

The following procedures will act as protection and help prevent accidents if carefully observed:

1. Never use chairs, tables, or boxes as a ladder.
2. Never climb a ladder until it is securely set. (Single ladder: distance from base to building should be one-fourth the length of the ladder.)
3. Check condition of ladder sides, steps, and rungs. Don't lean out from it while using it.
4. Do not carry too heavy loads up stairs or ladders; don't pile the load you are carrying so high that you can't see past it.
5. Never leave tools lying where they can fall on someone (or yourself) or cause a stumble.
6. Make use of salt tablets when working under a hot sun for extended periods.
7. Learn to recognize heat exhaustion and be prepared to aid fellow workers if they suffer from it.

Safety is a year-round part of the job. Keep it always in mind.

Comfort Stressed

AMONG the scores of new school-houses springing up throughout the South, many are notable for their use of the latest features of advanced school

building architecture. One of these is the addition to the Isidore Newman School in New Orleans. The total cost, including furnishings, equipment, and site development, was \$150,000.

A one-story structure, the new school building accommodates 150 children between the ages of five and six, divided equally among a kindergarten, a first grade, and a second grade, each with two sections. Construction is of steel, brick, and concrete, with bar joists supporting

a metal roof deck with insulated, built-up roofing. The ceiling is of plaster suspended below the joists, with insulation on top. In each of the six classrooms, four-fifths of the exterior wall is glass, totaling 3,000 feet of window glass in all. The interior has been painted with stress on the psychological use of color to quicken a child's interest in his surroundings.

One classroom has been designed for visual education, so arranged that it can

easily and quickly be darkened for the showing of educational movies or slides. There is a shop for woodworking and clay modeling, a small auxiliary classroom, a kitchen, teachers' lounge, and ample facilities for recreation and comfort. Floor coils of wrought-iron pipe provide the heating.

Dreyfous and Seiferth, of New Orleans, were the architects, and Cary B. Gamble and Associates, also of New Orleans, were the consulting heating engineers.

For more facts use Inquiry Card, SM-22K

WHY Hospitals and Schools are turning to

MELMAC TABLEWARE

QUESTION:

IS MELMAC tableware made of one of the hardest synthetics known?

ANSWER:

Yes... it is made from a thermosetting plastic material (melamine-formaldehyde) combined with very small particles of filler and coloring agents. It is molded and permanently set under high temperature and pressure.

Q: Is its color lasting?

A: Yes... the color, incorporated in the basic compound, runs throughout the molded piece. MELMAC's color and lustre remain for the lifetime of the tableware.

Q: IS MELMAC tableware odorless?

A: Yes... and tasteless, too.

Q: Will it soften on exposure to heat?

A: No... nor will it catch fire. MELMAC Plastic has the ability to withstand hot water. Furthermore, common solvents (alcohol, acetone, carbon tetrachloride) do not harm it.

Q: How about breakage?

A: Resistance to breakage is one of the greatest advantages offered by MELMAC tableware. On this score alone, MELMAC tableware saves many dollars, improves personnel relations and reduces reserve inventories.

Q: What are its other advantages?

A: There are many more big sales points for MELMAC tableware. Its weight, for example, is approximately only one-third that of similar earthenware or china parts. It is easier to carry, easier to stack. It is quieter to use—reduces clatter and noise—helps produce a more pleasant, relaxing atmosphere. Its excellent insulating properties tend to keep cold food cold and hot food hot.

Q: Does MELMAC tableware require any special care?

A: MELMAC heavy duty tableware is new and somewhat different from china or earthenware. Be sure that your customer uses adequate detergents in his dish-

washer and maintains washing conditions in accordance with leading health authorities' suggestions... namely, wash at 140°-160° F. and rinse at 180° F.

If cups discolor from coffee as they frequently do with china, wash them by hand using a detergent containing a wetting agent. If this is not practical, immerse in a 5% solution of Clorox and water together with a small amount of detergent containing a wetting agent to remove discoloration. Your customer has been doing this with china, and will be familiar with the technique.

And, although MELMAC tableware can be washed in the same equipment as earthenware or china, it does not stand boiling indefinitely. It is not recommended for use where parts are boiled after each service.

MELMAC will not catch on fire or melt; however, do not place in oven or over flame.

Q: Where is MELMAC tableware being used?

A: It is being used with great satisfaction in restaurants, schools, colleges, clubs, hospitals and other institutions throughout the country.

Q: Is MELMAC tableware saving money for hospitals, schools, colleges and other institutions?

A: Yes! Actual records kept by restaurants, hospitals, schools and other institutions show that MELMAC tableware is providing tremendous savings by its phenomenal resistance to breakage alone!

If you would like any further information, write Plastics Department, American Cyanamid Company, 30-40 Rockefeller Plaza, New York 20, N. Y.

*MELMAC is American Cyanamid Company's registered U. S. trade mark for condensation products of aldehydes and amines.



AMERICAN Cyanamid COMPANY

PLASTICS DEPARTMENT

230 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

Check List of SCHOOL SUPPLIES AND EQUIPMENT

NEW PRODUCTS
and news about established products
presenting the claims
made for them by their manufacturers

Consult the Coupon Page opposite. Send the Inquiry Card between pages 32-33 for further information. No charge, no obligation.



New Steel Window SM-400K
A new type of intermediate-weight, steel classroom window provides educational structures with increased light

effectiveness, marked economy in cost, and superior maintenance factors from the standpoint of window washing and replacement of broken glass.

The large, upper fixed light is recommended for glazing with 1/4-inch wire glass in a light diffusing pattern. The lower portion, or vision strip, is glazed with 1/4-inch or 1/2-inch clear glass. There are other glazing possibilities depending upon geographical location, climatic conditions, and degree of exposure to direct solar rays. Either or both lower panels may be vented. . . Use the Inquiry Card or write to Truscon Steel Company, Dept. SM-400K, Youngstown 1, Ohio.

Tile Flooring SM-413K
With the recent doubling of the number of colors in the line of Terraflex plastic

asbestos flooring, school architects now have 12 marbleized colors from which to choose. The tiles are bright and clear and do not fade with use. They are unaffected by grease, oil, alkaline moisture, or mild acid solutions. Resilient Terraflex can be applied below grade as well as above grade, over any type of base. It is used successfully in high-school gymnasiums. . . Use the Inquiry Card or write to Johns-Manville, Dept. SM-413K, 22 East 40 St. New York 16, N. Y.

New Tempera Colors SM-403K
Art and crafts teachers can make good use of the four new ready-mixed colors now available in the Prang Tempera line. They are burnt sienna, sky blue, flesh, and pink. Back in the line, too, are small 1/4-ounce jars in colors temporarily not available in this size—red-orange,

yellow-orange, blue-green, blue-violet, red-violet. . . Use the Inquiry Card or write to the American Crayon Co. Dept. SM-403K, 389-489 Hayes Ave. Sandusky, Ohio.



Enclosed Shade Head Rail SM-417K
Your school will look more modern when you use the Ra-Tux wood fabric window shade with the new, completely enclosed
(Turn to page 26)

For more facts use Inquiry Card. SM-238K



YOU CAN **BE FAMOUS**
FOR YOUR PANCAKES AND WAFFLES
the **Downyflake** way

Serve your patrons the right pancakes and waffles—they'll be back for more and bring others with them. Downyflake Egg Pancake and Waffle Mixes assure you that you're serving the best. You'll see

and taste the difference at once. Perfect, uniform results everytime. Light . . . tender . . . appetizing color and downright delicious. Yet, Downyflake's are so easy to prepare—just add water—bake.

23 FINE QUALITY FULLY PREPARED
Downyflake BAKING MIXES

Everything you need in mixes . . . for biscuits, cakes, muffins, donuts, rolls, etc.
DOWNYFLAKE BAKING MIX DIVISION • DOUGHNUT CORP. OF AMERICA
193 Seventh Ave., New York 1, N. Y.

For more facts use Inquiry Card. SM-24K

KEY CONTROLLED!

*Finest
Locker Security
at a NEW
LOW PRICE*

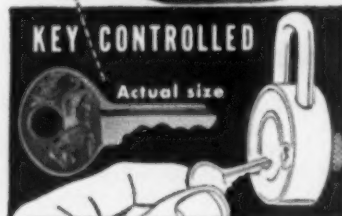
Master

NO. 1525 KEY CONTROLLED COMBINATION LOCK

Here's top-quality, low-cost locker protection and control. Your control key opens every locker. Your students get a strong, dependable combination lock . . . smooth-working, trouble-free. Double wall case . . . brass over hard wrought steel. Finest security at a new low price — by MASTER, world's leading padlock manufacturers!

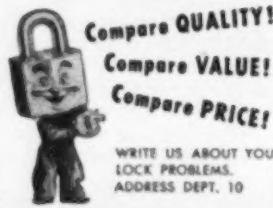
• Brass cylinder pin-tumbler mechanism — finest security known to locksmithing!

• One master key with each series, unless otherwise requested. Single key opens every locker.



KEY CONTROLLED

Actual size



Compare QUALITY!
Compare VALUE!
Compare PRICE!

WRITE US ABOUT YOUR
LOCK PROBLEMS.
ADDRESS DEPT. 10

Master No. 1500

Rugged, dependable. Long time school favorite. Double wall case. Time-tested, 3-tumbler mechanism. Same as No. 1525, but without key-control.



Master Lock Company, Milwaukee, Wis. • World's Leading Padlock Manufacturers

For more facts use Inquiry Card, SM-28K

TPS INC.

Everything for the Theatre

GELATINE
MAKE-UP
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**THIS MOWER
GOES TO SCHOOL...**



Ask the Cunningham Dealer for free demonstration. Write for details!

Cunningham

James Cunningham Son & Co., Dept. 54, Rochester 8, N. Y.

For more facts use Inquiry Card, SM-28K

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RACKS**

12 types of space-saving steel racks that keep clothing aired, dry and "in place". Both stationary and portable types in sizes to fit any space or capacity requirement. Floor racks, wall racks, combination units with lock boxes, fold-away racks, storage racks for band uniforms and complete check rooms.



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All products described in the editorial and advertising columns of the April issue of SCHOOL MANAGEMENT are listed on this

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head rail. All operating fixtures are hidden inside its solid wood construction. This strong, compact header assembly, Style M, combines unusually well with the company's newest-type, narrow splint fabric. It is available in a wide range of attractive colors, and is custom made to fit any window from 1 foot to 12 feet 9 inches in width. . . Use the Inquiry Card or write to the Hough Shade Corporation, Dept. SM-417K, Janesville, Wis.

Fire Extinguisher Decals SM-402K

New decal sets enable you quickly to identify extinguishers for three fire classifications: wood, paper, or rubbish; electric, gas, or chemical; anything not electric. A large decal is supplied for application to the wall above the fire extinguisher and a smaller one is made for use on the extinguisher itself. . . Use the Inquiry Card or write to the Meyerco Company, Dept. SM-402K, 5323 West Lake Street, Chicago 44, Ill.

Wet Grindstones SM-428K

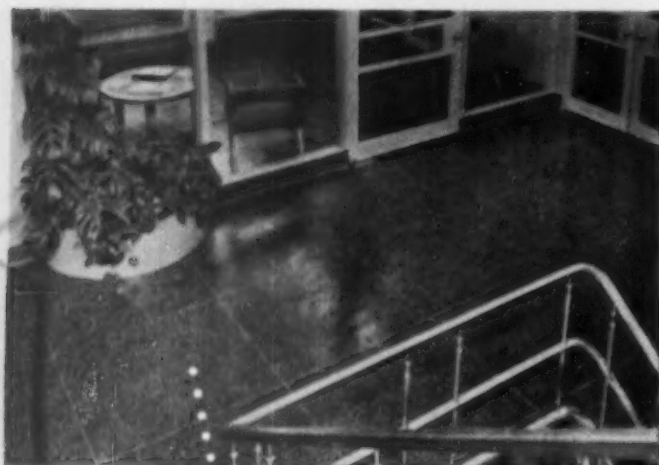
Schools with tools to sharpen will find the new Friction-Matic grinders of interest. There are three new models. A floor-type unit for large woodworking and school shops comes complete with 1/4 hp motor and floor stand. Another model has two grindstones driven by a single motor, and is mounted on bench or floor stand. The third model is hand operated. These grinders have a self-adjusting friction drive, a simplified friction

roll, and constant speed throughout their lives. . . Use the Inquiry Card or write to the Boice-Cramer Co. Dept. SM-428K, 977 Central Ave. Toledo 6, Ohio.

Improved India Ink SM-401K

Grumbacher waterproof India ink has been improved so that it now adheres to acetate, without previous preparation of the surface. Another feature of this ink is its use of Lixium. This solvent keeps

For more facts use Inquiry Card. SM-396K



floor • san • THE SAFE CLEANSER FOR EVERY SCHOOL CLEANING JOB

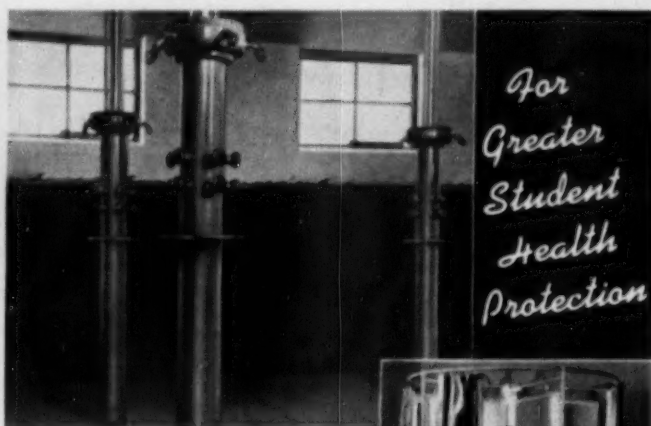
Proper maintenance becomes increasingly difficult when schools are over-burdened with record enrollments, and the use of efficient, safe, labor-saving cleaning products is most important. Floor-San Liquid Scrubbing Compound helps ease many time consuming jobs. It is a universal cleanser—cleans wood, painted walls, rubber, and metal as well as all flooring materials—safely, thoroughly. Only one solution to make . . . works in any water. Try Floor-San. Write today for more information.

HUNTINGTON LABORATORIES, INC.
HUNTINGTON, INDIANA TORONTO, CANADA



CUTS SCHOOL CLEANING COSTS

For more facts use Inquiry Card. SM-308K



Bradley Shower installation at Mount St. Michaels Academy, Bronx, New York.

Install Bradley Sanitary Multi-Stall Showers

With Bradley Multi-Stall Showers there are no corners or dark areas to collect dirt and require constant cleaning. Maintenance is less too because one Bradley 5-Stall Unit requires only three supply lines and performs the service of five conventional "single-stall" showers. Worthwhile hot water savings are also realized with the Bradley central mixing chamber.

Bradley 3-and 5-Stall Shower Units come with or without receptors and are easily installed on any type of floor including wood. Write today for sanitary, money-saving facts on Bradley Showers. BRADLEY WASHFOUNTAIN CO., 2243 W. Michigan Street, Milwaukee 1, Wisconsin.

BRADLEY
multi-stall showers
Distributed Through Plumbing Wholesalers

Bradley 3-Stall Shower Unit showing sanitary receptor and compact, space-saving design.

Send For Illustrated Catalog 4701 Today



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THE WORLD'S OLDEST AND LARGEST THEATRICAL FABRIC ORGANIZATION • ESTABLISHED 184

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COSTUMES, CURTAINS
AUDITORIUM DECORATION

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WRITE FOR FREE BOOKLET "WHAT FABRICS CAN DO FOR YOUR SHOW"

SCHOOL SUPPLIES AND EQUIPMENT

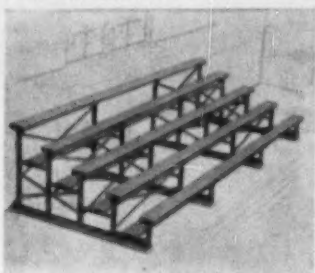
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the ink free-flowing and cleans the pen as it is used. . . Use the Inquiry Card or write to M. Grumbacher, Inc., Dept. SM-401K, 460 West 34 St. New York 1, N. Y.

Woodworking Machines SM-425K
Excellent for school and maintenance shop use is the new "J" line of junior-type woodworking machines. Their flowing lines make them easy to keep clean. Simplicity and safety of operation are built into each machine. The line includes a band saw, jointer, surfacer, lathe, mortiser, disc sander, spindle sander, and shaper. The



J-120, 20-inch band saw shown has a cast-iron base and steel frame. The 24 x 24-inch table, tilts 45 degrees right and 12 degrees left. All bearings are lubricated-for-life. . . Use the Inquiry Card or write to Yates-American Machine Company, Dept. SM-425K, Beloit, Wis.



Steel Bleachers SM-414K
Safety is the first consideration in design of these new, Allsteel bleachers. The framework is made of H-type welded structures. Seat and foot boards are made of selected, kiln-dried, structural 2 x 10 lumber.

Assembly or disassembly for changing requirements is easy since the sections are interchangeable. All sections are light enough to be carried by one man and will pass through any standard-size door. These bleachers may be used indoors or outdoors. . . Use the Inquiry Card or write to the Berlin Chapman Company, Dept. SM-414K, Berlin, Wis.



School Furniture SM-407K
Good posture and comfort can be the lot of your students when they use this new Electroweld school furniture. It comes in a full range of sizes for needs

that range from kindergarten to college.

These lightweight chairs and tables have durability built in by welded tubular steel frames and bracing. Wood parts are solid hardwood or banded heavy plywood, in either natural wood or walnut finish. The curved leg bracing allows ample leg room and easy janitor cleaning service. . . Use the Inquiry Card or write to Electroweld Steel Corporation, Dept. SM-407K, 505 West Foothill Blvd. Arma, California.

Line Marker

School corridors, gymnasiums, rooms, hard-surfaced parking lots, and traffic areas can all be marked with the Universal, flow-controlled, traffic line-marker. It applies paint evenly over entire width of the strips. With the use of interchangeable spreaders lines of from 2 to 8 inches can be laid down.

Machine is gravity-fed, which makes for simplicity of operation and maintenance. It has a sled-type paint spreader

SM-409K

which accommodates any striping or zone paint of standard manufacture. . . Use the Inquiry Card or write to Universal Marine and Manufacturing Corporation, Dept. SM-409K, 137 Alexander St. Yonkers 2, New York.

Waste Can Cover

SM-429K

Conversion of any used 30 or 55-gallon drum to an oily waste can can be made with the Protectoseal self-closing drum cover. The heavy-gauge steel cover is

For more facts use Inquiry Card SM-318

Over the hill to the Schoolhouse
with POWER and SAFETY to spare

CHEVROLET School Bus Chassis

Mountains are like molehills to these 1950 Chevrolets. Going up, their famous valve-in-head engines, of increased horsepower and torque, take the steepest highway grades smoothly and surely. Going down, their self-energizing brakes and their easy-to-shift transmissions provide positive speed control. . . For safety and savings, choose Chevrolet.

CHEVROLET MOTOR DIVISION, General Motors Corporation, DETROIT 2, MICHIGAN



SCHOOL BUS CHASSIS

199-INCH WHEELBASE SCHOOL BUS CHASSIS

Gross vehicle weight, 13,300 or 15,000 pounds depending on tire equipment. Capacities, 42 to 54 pupils. Chevrolet Load-Master valve-in-head engine, 103 h.p., 193 foot-pounds torque (pulling power) at speeds under 35 m.p.h. governed speed.

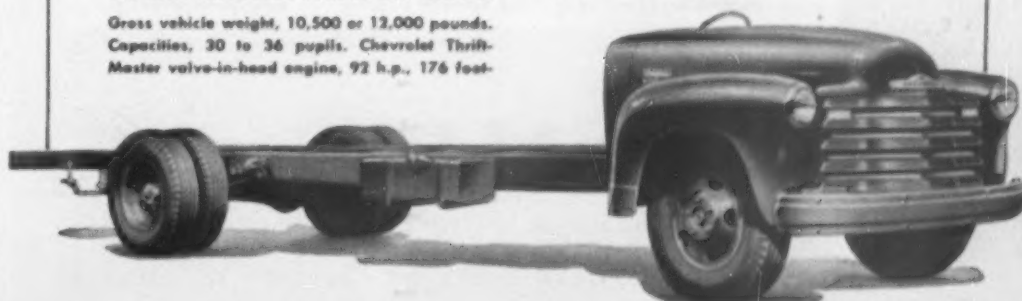
161-INCH WHEELBASE SCHOOL BUS CHASSIS

Gross vehicle weight, 10,500 or 12,000 pounds. Capacities, 30 to 36 pupils. Chevrolet Thrift-Master valve-in-head engine, 92 h.p., 176 foot-

pounds torque (pulling power) under 35 m.p.h. governed speed.

137-INCH JUNIOR SCHOOL BUS CHASSIS

Gross vehicle weight, 7600 pounds. Chevrolet Thrift-Master valve-in-head engine, 92 h.p., 176 foot-pounds torque (pulling power) under 35 m.p.h. Capacity, 16 pupils.



(Continued from page 27)

fastened to a steel drum by a single bolt tightening a steel band. If the temperature within or surrounding the drum reaches 160 degrees, a fusible link melts. The cover then closes instantly, either smothering out the fire within the drum or protecting the contents from outside ignition. . . . Use the Inquiry Card or write to Protectoseal Company, Dept. SM-429K, 1920 South Western Ave. Chicago 8, Illinois.

Duplicating Supplies SM-405K

Here's a new line of duplicating supplies with features especially good for school use. It includes stencils, inks, and correction fluid. The stencils are designed for long reproduction runs. They are especially strong for stylus work in drawing forms and illustrations. They have a dull velvet finish which provides excellent visibility, appearance, and contrast. The ink is soluble in water and is miscible with other standard quality inks. . . .

Use the Inquiry Card or write to the Underwood Corporation, Dept. SM-405K, 1 Park Ave. New York 16, N. Y.

School Signs SM-411K

Durable, high-quality signs for every school need—from numbers and the name on the superintendent's door to road warning signs—are available from the Hull Sign Company. Many stock school sign wordings come in a variety of materials, including porcelain enamel, plate

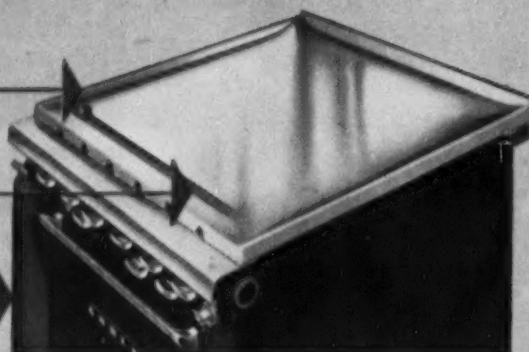
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New! An Even Greater Fry Top Range by GARLAND *the Leader*

**New Higher Edges
reduce spill-overs!**

**New Front Drain Channel
for easier drainage!**

**New Grease Container
for greater convenience!**



THREE Outstanding New Features... PLUS bigger frying capacity . . . It's the NEW Garland Fry Top Range!

New higher edges provide greater depth for griddle and reduce spill-overs! New wide drain channel extends across the front. The griddle surface slopes slightly toward the channel for better drainage. New construction gives you greater frying area, greater frying capacity! New, big capacity grease container, for added convenience, fits on front of range. Readily accessible, it lifts off easily for quick emptying of grease.

Again Garland—the leader—with all these important new improvements, moves still farther ahead in value! Before you buy, it pays to see your Garland dealer! See Garland and compare!

All Garland units are available in stainless steel and equipped for use with manufactured, natural or L-P gases.

Judged Finest by A.S.I.E.



New Model 47-29 CX

GARLAND*

THE TREND IS TO GAS

Heavy Duty Ranges • Restaurant Ranges • Broilers • Deep Fat Fryers • Toasters
Roasting Ovens • Griddles • Counter Griddles

PRODUCTS OF DETROIT-MICHIGAN STOVE CO., DETROIT 31, MICHIGAN

*GAS, U. S. PAT. 600.

SCHOOL SUPPLIES AND EQUIPMENT

Use the SCHOOL MANAGEMENT coupon on page 25 or the Inquiry Card between pages 32-33. Indicate key number of item on which you wish to receive further information.

glass, and bronze. Other numbers, words, and symbols may also be made to order. . . . Use the Inquiry Card or write to Hull Sign Company, Dept. SM-411K, West Winfield, N. Y.

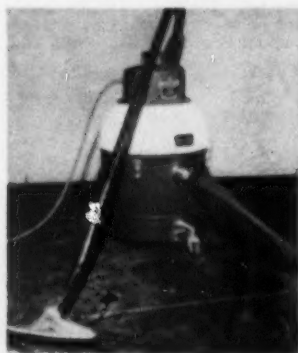


Typing Aid SM-412K

The teaching of touch typing can be simplified by use of the Potter Type-N-Guide. This device confines fingers to their respective key groups. It reduces stroking errors and bunching of keys by the beginner. It does not become a typing crutch habit because the strips of which it is composed can be eliminated from the keyboard as typing progresses. Strips are made of plastic and are adjusted to a metal back. . . . Use the Inquiry Card or write to Russell R. Potter, Dept. SM-412K, 31-11 89th St. Jackson Heights, New York.

Lightweight Scaffolding SM-420K

Of great assistance to maintenance men is this new, sectional-type aluminum rolling scaffold. It is offered in two styles—the stairway type, illustrated, and the ladder type. Both are supplied in one or more sections, with guard rails. They are easy to erect. Except for the casters and platforms, the scaffold is made of light, durable aluminum alloy. It has special locking features for safety. Base dimensions are 4 feet 6 inches by 6 feet. . . . Use the Inquiry Card or write to the Patent Scaffolding Company, Inc. Dept. SM-420K, 38-21 12th St. Long Island City 1, New York.



Wet-Dry Vacuum SM-418K

For small and intermediate cleaning operations in schools, Multi-Clean makes an improved, 5-gallon, wet-dry vacuum, the MCV-205A. It moves air at the rate of 108 cubic feet per minute, which gives

it outstanding pickup ability for a small-capacity vacuum. It has a water lift of 52 inches.

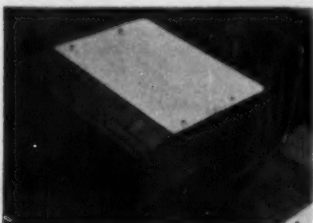
Total weight of the machine is 36 pounds; over-all height is 25 inches. Motor is $\frac{1}{4}$ hp, 115 volt, universal AC/DC. The machine rides on one rubber ball-bearing swivel caster and two fixed-rubber wheels. It can be carried by the top handle or moved by pulling on the hose. . . . Use the Inquiry Card or write to Multi-Clean Products, Inc. Dept. SM-418K, 2277 Ford Parkway, St. Paul 1, Minnesota.

Three-Purpose Eraser SM-424K

This 3-purpose electric tool erases accurately without burning or tearing paper.



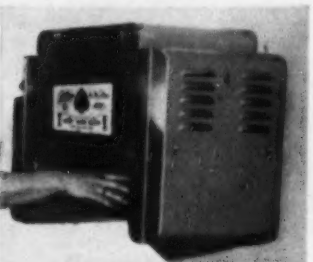
Its ball point bur-nisher smoothes erased areas so they can be used for perfect re-drawing or re-inking. Its rotating abrasive disc can sand pencil or compass leads to needle-point sharpness. Vibrationless motor provides a speed of 3,000 r.p.m. A sliding snap-type switch permits intermittent or continuous operation. . . . Use the Inquiry Card or write to the Dremel Mfg. Co. Dept. SM-424K, Racine, Wis.



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The light beam of an electric eye controls the machine. Action starts the moment the hand breaks the beam. This device lowers current consumption and reduces maintenance problems. There is a

broad grille at the bottom of the dryer, and since all parts are fully encased, they cannot come in contact with the hands. This Underwriters' Laboratories approved unit hangs on the wall. It plugs into any socket. . . . Use the Inquiry Card or write to the Electronic Towel Sales Company, Dept. SM-415K, 545 Fifth Ave. New York 17, N. Y.

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Inquiry Card or write to Inertel Co. Inc. Dept. SM-416K, 480 Frelinghuysen Ave. Newark 5, New Jersey.

Radiant Heat Panels SM-427K

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For more facts use Inquiry Card, SM-34K

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New safety, economy, and dependability come by the bus-load in the new International Schoolmaster Buses.

Every bus in this complete new line is all new and all proved. Every bus is heavy-duty engineered. See what this can mean to your school bus operation:

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INTERNATIONAL SCHOOL BUSES

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(Continued from page 29)

element wires are embedded. They are hermetically sealed so that elements cannot corrode or erode in use. Panels can be mounted on wall or embedded in wall or ceiling. Because of temperatures used, panels are always safe to touch. Individual room temperatures can be controlled by thermostat. Since they are connected into the building circuit, it is possible to switch the panels on and off like the lights. . . Use the Inquiry

Card or write to General Radiant Heater Company, Inc. Dept. SM-427K, 101 Park Ave. New York 17, N. Y.

Stone Coating SM-410K
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ing loose particles into an insoluble, steel-like mass. It carries a written guarantee against peeling and cracking.

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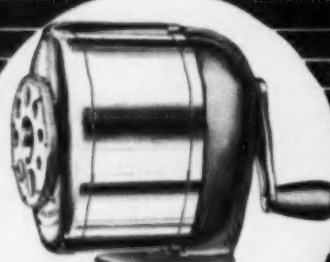
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MANUFACTURERS' LITERATURE

Use the below MANUFACTURERS' literature on page 32 or the Inquiry Card between pages 32-33. Indicate key number of item on which you wish to receive further information.

Lighting SM-462K
"Over-ALL. Lighting by Wakefield," handsome new catalog, discusses the Wakefield concept of good lighting and describes in great detail the equipment which will help achieve this goal. . . Use the Inquiry Card or write to the F. W. Wakefield Brass Co. Dept. SM-462K, Vermilion, Ohio.

Movable Walls SM-472K
"Mills Movable Metal Walls" is the title of Catalog No. 50, a practical workbook for architects, engineers, and those dealing with the problems involved in flexible division of interior space. The general advantages of movable walls, special Mills features, and detailed construction drawings are all included. . . Use the Inquiry Card or write to the Mills Company, Dept. SM-472K, 975 Way-side Rd. Cleveland 10, Ohio.

Sink Frames SM-471K
Color folder titled "Trimedge Extruded Aluminum Pre-Formed Sink Frames" has an inside spread wall chart. This gives complete data on how to install these frames, and illustrations which help simplify the job. . . Use the Inquiry Card or write to Trimedge, Inc. Dept. SM-471K, 4021 Mahoning Ave. Youngstown 1, Ohio.

Soap Dispensers SM-473K
Titled "American . . . Manufacturers of Quality Soap Dispensers," this handsome booklet with large illustrations gives detailed specifications for the types of valves used and for the many dispensers—for lather, powder, liquid, beads, or pumice—included in the line. . . Use the Inquiry Card or write to American Dispenser Company, Dept. SM-473K, 115 East 23 St. New York 10, N. Y.

Classroom Daylighting SM-468K
"Better Classroom Daylighting" is a large, well-illustrated, easily read pamphlet which shows the minimum requirements for daylighting. It tells how to bring in a greater quantity of daylight, shows how to improve the quality of admitted daylight, gives engineering proof of the method recommended, and tells of additional benefits from the use of Fenestra intermediate steel windows. . . Use the Inquiry Card or write to Detroit Steel Products Co. Dept. SM-468K, 2250 East Grand Blvd. Detroit 11, Michigan.

Projectors SM-466K
Catalog titled "SVE Projectors and Projection Accessories" covers slide and filmstrip projectors of 100 to 1000 watts, and accessories such as slide binders, new micro-slide attachment, new micro-film attachment, extra lenses, and other important projection items. . . Use the Inquiry Card or write to Society for Visual Education, Inc. Dept. SM-466K, 100 East Ohio St. Chicago 11, Ill.

Program Clocks and Bells SM-461K
The 1950 edition of Bulletin No. 167, "National 'Rings the Bell' Automatically," gives a wide coverage of school needs in electric program clocks, room clocks, and bells. . . Use the Inquiry Card or write to National Time & Signal Corporation, Dept. SM-461K, 21800 Wyoming Ave. Detroit 20, Michigan.

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Booklet on "Grading Rules for Northern Hard Maple (Acer Saccharum), Beech and Birch Flooring" gives accurate grad-

ing rules and uses of flooring desirable for classrooms, gyms, shops, and cafeterias. . . Use the Inquiry Card or write to Maple Flooring Manufacturers Association, Dept. SM-467K, 46 Washington Blvd. Oshkosh, Wisconsin.

New Business Machines SM-477K
Booklets describe the IBM Service Bureau and the following IBM machines: Cardtype, Accounting Machine with wheel printing, the Alphabetical Collator, Card Punch, Consecutive Spacing Time Recorder, and Electronic Statistical Machine. . . Use the Inquiry Card or write to International Business Machines Corp. Dept. SM-477K, 590 Madison Ave., New York 22, N. Y.

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TEACHING MATERIALS

Use the SCHOOL MANAGEMENT coupon on page 22 of the Inquiry Card between pages 12-13. Indicate by number of item on which you wish to receive further information.

Posture Posters SM-488K
"These Sitting Americans." Revised. 6 posters, 17 x 22 inches each. Free.
These posters will help a teacher illustrate "good" and "bad" sitting posture. Effects of posture on the eyes and on general health are stressed. . . Use the Inquiry Card or write to American Seating Company, Dept. SM-488K, Grand Rapids 2, Michigan.

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"Fifty Tested Cereal Recipes." CUS. Free.
Unit includes a fact-full 32-page teacher's source book, two 22 x 16-inch wall charts, and 25 students' work sheets. For high-school home economics classes. . . Use the Inquiry Card or write to the Cereal Institute, Inc. Dept. SM-485K, 135 La Salle St. Chicago 3, Illinois.

Teaching Aids Catalog SM-491K
"Teaching Aids on Family Security." 1950 catalog. 16 pages. Free.
Lists booklets, charts, and films—some free and some for which there is a charge—which will be of assistance in teaching the elements of family security

involving life insurance and money management. . . Use the Inquiry Card or write to Institute of Life Insurance, Educational Division, Dept. SM-491K, 60 East 42 St. New York 17, N. Y.

Developing Guide SM-487K
"Kodak Developing Dataguide." 50¢.
This is a dial calculator which gives the correct developing times for various combinations of Kodak films and developers. Information on agitation during de-

velopment and the replenishment and storage of solutions is also included. Guide is punched for notebook insertion or hanging on darkroom wall. . . Use the Inquiry Card or write to the Eastman Kodak Company, Editorial Service Bureau, Dept. SM-487K, Rochester 4, New York.

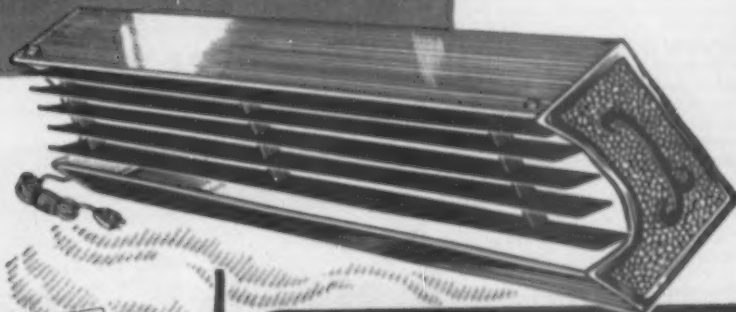
Gymnastic Stunts SM-486K
"Individual and Dual Stunts." Set of 160. \$2.50.
The authors, Hugo Fischer and Dean

Shanbold, have applied the visual approach to the teaching of gymnastic stunts for physical education. There are actual photographs of each individual stunt, together with a description of it.

Each stunt is on a separate card. Included are 347 photographs. All levels of instruction, from the elementary grades through college, are covered. . . Use the Inquiry Card or write the Burgess Publishing Co. Dept. SM-486K, 426 South Sixth St. Minneapolis 15, Minn.

For more facts use Inquiry Card, SM-38K

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How About Some Guidance for Teachers, Too?

By LEONARD K. MAGNIFICO
Associate Professor of Educational
Psychology and Mental Health,
Richmond Professional Institute of the
College of William and Mary

Condensed from
Virginia Journal of Education

IN the hundreds of thousands of pages written on the need for guidance in schools and colleges, the maladjusted student's problems have been seriously considered—but what of the maladjusted teacher?

Despite efforts to discover teachers' needs, it is tragic to note that in the evolution of the whole guidance movement, the personal, social, educational, and vocational problems of the teacher himself have been disregarded almost entirely.

According to Gertrude Driscoll, assistant professor of education at Columbia University, teachers are the backbone of any educational program which has as its goal the physical and mental health of children. Some teachers working under the most unfortunate limitations succeed in creating an emotional environment conducive to growth, she points out, while other teachers with the most favorable conditions create destructive patterns of behavior.

Wholesome Teachers Necessary

Guidance is to be the work of every teacher in the school, and if we really expect every teacher to participate successfully, then the teacher himself must be a wholesome personality or his counseling will do the student far more harm than good.

Students tend to pattern their behavior after the example set by their teachers, writes Raymond Harris. It isn't just that they are prone to imitate the teacher's physical mannerisms, he says. "Even more important are the psychological factors which govern emotional behavior, for these too are copied by the students. . . . How significant it is that students shriek back at the teacher who shrieks at them, that they fidget with the teacher in one class and work quietly in another, that every social question becomes a personal issue in one class and a group problem in another." It seems that the cause of many students' personality problems originates in the teacher, and it is the teacher's guidance that actually should be the primary issue.

Consider the "Whole Teacher"

Administrators, guidance coordinators, and research workers need to become more positive in their dealings with teachers. We cannot take thousands of teachers—for the most part trained in traditional methods—and expect them to understand the whole child, while no one is interested in understanding the whole teacher.

It is not enough for administrators to suggest more reading, more professional courses in educational guidance, or discussion of lengthy reports on guidance—usually a regurgitation of educational textbooks and periodicals—at faculty meetings.

Dr. Michael made a study of teachers' attitudes after they had taken a professional course in guidance, and he found that they learned some abstract facts about guidance and little or nothing more. That they did not tend to apply these facts is evident from the statement that the course in educational guidance "did

not change to any noteworthy extent the attitudes of experienced teachers toward 50 behavior problems which are commonly found in the classroom."

What can be done about this situation?

Whatever causes teachers' bad mental health, a sound personnel service for them will tend to result in happy teachers. We can take a tip from those industries that enjoy pleasant job relations and have a personnel service ranging in scope from the lowliest worker to the highest supervisor.

Guidance is a continuous process, and all of us, no matter how wholesome our personalities, will encounter problems from cradle to the grave.

A problem involves frustration, since a problem doesn't result unless one has a goal and is blocked by ignorance, lack of information, or fear of not making the right decision. "Far too many teachers consciously hold an ideal of self," says Paul Witty, "in which deprivation, denial, and abstinence are powerful elements. In

some cases, this ideal results in a denial of many normal appetites and satisfactions. Such a personality tends to alienate children and young people." The teacher should have, he says, "the kind of personality which youth will find sufficiently attractive to emulate—not to reject or avoid. The effective teacher is a person whose companionship, counsel, and advice are sought."

The statement "behavior is caused" applies to teachers as well as pupils. Four

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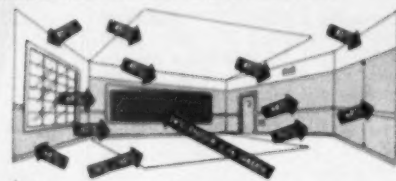
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pletely in 20 minutes), one-coat covering (a single coat covers almost any surface, although two coats may be necessary for best results on some types of new work), and washable (repeated washings do not change its light reflectance value). It is available in 14 colors and white. One gallon covers approximately 400-500 square feet. Material cost—approximately 1c per square foot.

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basic principles for supervisors to keep in mind to insure good relationship were advised by the job relations bureau of the War Manpower Commission during the last war. And they are applicable to supervisors in school work.

1. Let each worker know how he is getting along. Figure out what you expect of him. Point out ways to improve.
2. Give credit when due. Look for extra or unusual performance. Tell him while "it's hot."

3. Tell people in advance about changes that will affect them. Tell them why, if possible. Get them to accept the change.

4. Make best use of each person's ability. Look for ability not now being used. Never stand in a man's way.

Conference-laboratories should be established in bona fide graduate schools and staffed by men and women who are sympathetic to the concept of better human relations in the school. These people would serve as guidance coun-

sors to administrators and coordinators who attend workshops to consider this problem. The staff would also act as guidance counselors to the administrators and coordinators throughout the school year.

Although no amount of self-help can equal the assistance that can be rendered by a fully equipped and competently staffed guidance bureau, much good work can be done in this field by extensive reading. Helpful texts for both teachers and administrators are beginning to ap-

pear in increasingly greater numbers.

A problem which arises even after the establishment of guidance bureaus is that of getting the teacher and the administrator to face his own inadequacies and seek assistance. But this problem must be solved. Now that education has become so universal, the average student must spend at least 12 years in close company with teachers whose type of mental adjustment is apparently merely a matter of chance. It would be absurd to say that if we look back into the history of every maladjusted individual, we would find somewhere along the line a maladjusted teacher; but it might be so in a large number of cases, entirely too many for the nation's welfare.

Before You Build Plan Thoughtfully And Cooperatively

THE statutes of the various states, known as "building codes," should be revised. The obsolete sections should be deleted and the antiquated requirements of such sections should be removed to permit the construction of school buildings that will be safe, functional, and within a cost range that can be met by modern methods of taxation for capital expenditures.

This is the opinion expressed by the sixth annual work conference on Administration and Organization of Rural Education, at Teachers College, which met for several weeks last summer.

School building planning should be carefully supervised by specialists in the field of school building architecture. The building plans should include provisions for special rooms, and other areas which must be provided to furnish services and meet special needs. It is necessary to good planning for the superintendent, principal, teachers, members of the board of education, and patrons to work cooperatively with the architect to determine the kind of a building needed.

All plans for school buildings and additions should be submitted to the state education department prior to any work being undertaken thereon. The state superintendent's office should be equipped to provide educational-architectural services.

The local district should have the final "say-so" but the advice and assistance of the state superintendent's office should be sought before the local district enters into any contract to build school buildings.

Because of the inability of school districts in so many states to finance the construction of the traditional type of school building, there should be architectural planning of semi-permanent type buildings of considerably lower construction cost than that encountered in the traditional type of building, in order to meet the present building crisis.

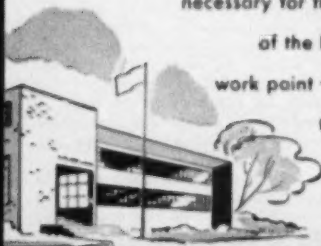
BOARD of education members in White Plains, New York, meeting in the audio-visual education office of Dr. Franklin T. Mathewson to hear a talk on the use of audio-visual aids, received a very practical demonstration with the talk. After 15 minutes of chit-chat preceding the session, Dr. Mathewson suddenly called for order and switched on a recording machine that played back all the random conversation that had just been bandied about . . . *White Plains Reporter-Dispatch*

THE heyday for visual education is probably very near at hand. *Educator's Washington Dispatch* reports that within the next two years every rural schoolhouse will have access to electric power.

Inquiry Card, SM-68K

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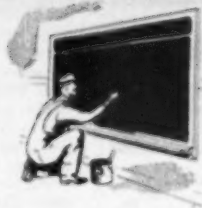
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Regular school personnel completely resurface old, worn slate or composition chalkboards in scientifically approved color by applying ENDUR 2-24 GREEN Chalkboard Resurfacer with brush or spray gun.

For new school construction ask your school supplier about ENDUR CHALKBOARDS of industrial tempered Duolux to which smooth, durable ENDUR "200" SERIES surfaces have been factory applied.

Also available in ENDUR 2-20 GREEN, a darker shade with slightly lower light reflectance value for use where maximum contrast between board and chalk is required.

Gallon covers approximately 250 square feet for a material cost of only 3c per square foot.



ENDUR "300" SERIES

NON-SLIP* FLOOR PAINT FOR WOOD OR CONCRETE

A durable, attractive floor finish specially designed for use on concrete. Resists water and wear, greases, oils, and chemicals. Seals concrete floors — keeps them from harboring germs of athlete's foot, etc. Ideal for shower and locker rooms, lunch rooms, corridors and stairways.

*ENDUR "300" SERIES paint contains minute particles of silicon carbide ("carborundum") and aluminum oxide (highly abrasive material used for grinding wheels). These particles are uniformly suspended in a rubber base by a special process. They bond the paint to the surface to assure highly durable and virtually slip-proof floors.

Gallon covers approximately 500-600 square feet. Material cost — approximately 2c per square foot.



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Gentlemen:

Please send me full particulars, including Color Chart, on the Endur System for Modern Schools.

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School _____

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and State _____

A school plant workshop will be offered at Cornell University, Ithaca, New York, from July 3 to August 12. Intended for school officials faced with planning a school building and for those who expect to become specialists in this area, the workshop will focus attention on the problem of housing the millions of youngsters who will be attending the public schools in the very immediate future.

Specialists in school building architec-

ture, heating and ventilation, lighting, home economics, industrial arts, agriculture, and other areas will be available. Problems to be considered include surveying building needs, estimating probable enrollment, determining the number and kinds of rooms, and appraisal of plans and administrative procedures.

Further information and reservations may be obtained from Professor J. E. Butterworth, Stone Hall, Ithaca, New York.

A REALISTIC approach to career counseling was tried out at the New York Vocational High School recently when 13 leaders from labor, management, and government agencies concerned with industry talked over job prospects with students and prospective students. The "Career Day" project was planned to advise students in their choice of careers before they are very far along in high school and feel it is too late to change their courses.

Camp as an Antidote For Secret Societies

Condensed from
Michigan Education Journal

GRAND RAPIDS has an antidote for secret societies. A clever and cagey campaign, climaxed by a week-end camp house party, proved to Grand Rapids Central High boys and girls that their school can plan and carry out an ideal, safe-and-sane, supervised social program. They've decided they don't need fraternities and sororities now.

Here's how it happened.

During the school year 1946-47, at the request of the Grand Rapids Board of Education, the administration informed all high-school students that they must obey the state law against having secret societies.

School authorities insisted that students pledge their non-affiliation or take the legal consequences—no promotion, no credit for courses taken, no graduation. They notified the parents, too, by letter and through local newspapers, of the necessity for obedience to the law.

Reactions of parents and high-school students were varied; some confusion and bitterness resulted.

As the school administrators strove to develop understanding of the matter on a democratic basis, they kept meeting one recurrent argument. Fraternities and sororities were needed for an active social program.

It Had To Be Proved

To meet this argument, the school had to prove to its boys and girls that a school-generated and school-supervised social program can be more enjoyable, more worth while than the sort of thing the secret societies could produce.

The principal made the first move. He called in the student-personnel director, the senior advisor, and a group of senior class leaders.

The question was put to the seniors. Would they need fraternities and sororities if an active social program, planned by them, were provided by the school?

The students were sincere in their answer. They just wanted an active social program. And they got it.

Leaders among the students were called in for friendly and understanding periods of talking it over. Every senior was asked to write an answer to one question: What do fraternities and sororities do for you that Central can't do better?

Answers to the question were flabbergasting at first. Students listed formal dances, Sadie Hawkins dances, creation of "social prestige," bull sessions, weekly meetings, and a house party. The call for a house party was a humdinger—but Central's teachers dug in and went to work.

Seniors were kept busy on class activities. (The class of 1947 in one year bought an organ for \$2,300 through class activities.)

Later Hours Approved

The social program was worked out step by step. Instead of being from 8 to 11 P.M., hours for school parties were changed to 9 P.M. to 12:30 P.M. on Friday nights, and to 9 P.M. to 12 M. on Saturday nights.

Formal dances and "damsel drags" were set up. Parties were held each week. Authorization was given for away-from-the-school parties: hayrides, skating, and picnics.

More clubs were formed. Membership rules were inspected, and occasionally amended. Sponsors were shuffled.

By the end of the year 1947-48 every

For more facts use Inquiry Card, SM-41K

Here's a Useful Combination ...Requires Very Little Space

1. GAYLORD BULLETIN BOARD

For Libraries, halls, classrooms — to display book jackets, bulletins, any printed or illustrative matter. Board requires wall space only 40" wide — turned length-vertical requires wall space only 32" wide. Frame made of sturdy, quarter sawed white oak in light or dark finish — surface of heavy cork, glued on strong plywood to prevent warping. Posting surface, 36" x 28" — overall 39½" x 31½".

2. GAYLORD DICTIONARY STAND

Strong — well built — for all types of libraries. Sloping top holds dictionary at convenient angle — two shelves (middle shelf adjustable) for encyclopedias and other reference books.

Made of quarter sawed white oak in light or dark finish. Height (rear) 44" — height (front) 41". Width of top 21" — depth 15".

Either item may be purchased separately. Immediate shipment. Write for circular SM giving full information and prices.

Gaylord Bros. INC.

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25% to 50%**
with one of these wringers



Geerpres Mop Wringers
do this because:

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3. Wringing with Geerpres means uniformly dry mops.
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5. Geerpres wringers leave no rings on the floor since splash-over is virtually eliminated.
6. Hotter Water can be used where floors can take it.
7. Geerpres wringers do not tear mop strings loose.

Shown: No. 2436 Outfit Complete

Ask for
Catalog No. 946.

... A Geerpres wrings everything but the stick!

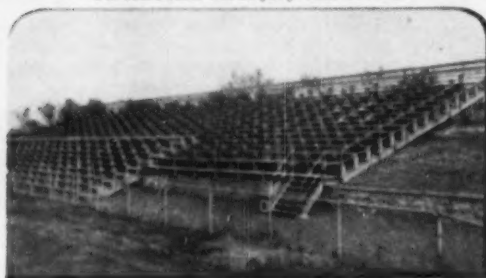
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Plan new additional grandstands with factory-built, low-cost Kerrigan Steel Sections. These permanent grandstands can be easily erected to fit your existing stands (see photo). Many schools have effected great savings by erecting Kerrigan Sections themselves. For complete information,

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Weldforged GRANDSTAND DIVISION, DEPT 3

KERRIGAN IRON WORKS, Inc.
NASHVILLE TENNESSEE

need had been met but one—the all-school house party.

In the past—before the law against secret societies in high schools—the fraternity and sorority house parties had been a worry to the school authorities, parents, and to some of the boys and girls. Frequently parents were kept in the dark—or high-pressured by the “Everybody’s going . . .” technique.

The “fun” usually consisted of loud, late, rowdy, unplanned darn-foolishness. Weekends of unsupervised frivolity put circles under the eyes of too many fraternity men. All-night card parties, indiscreet woo-sessions, and senseless palaver were the things to do before Grand Rapids worked out its successful plan.

But the house-party challenge was met. The administration approved plans for an all-school house party at St. Mary’s Lake Camp. Class officers named a 25-member planning committee to work with the senior adviser. Subcommittees were appointed to arrange for transportation by chartered bus, to set up a program of waterfront fun, indoor games, square dancing and other activities, outside sports and tournaments, and chapel on Sunday. The whole program was kept flexible. Enough was planned to get everyone into something good—that was all.

Responsibility for chaperoning the house-party guests was shared by teachers and parents.

Success of the party may be judged by the agreement of the students that they no longer needed fraternities and sororities. Everyone had a good time, including parent and teacher chaperons. Said they:

“The camp’s a natural . . . The food is excellent. We had more than we could eat . . . The surroundings are beautiful, the cabins and lodges comfortable and cozy . . . We played table tennis, shuffleboard, softball. We went swimming and canoeing. We enjoyed the rowboats and the rafts . . . Best of all, we found the camp inexpensive. Every senior could afford to go.”

It’s Big and Roomy

The camp can accommodate 125 persons in the warm months, and 85 in the winter. The huge fireplace in the central recreation room is an ideal place for long conversations and story-telling when the wind howls outside and campers are tired after hours of winter sports. Administrators envision the camp as good not only for summer weekends, but for conferences, workshops, recreation, and for a thousand and one good purposes which add to the effectiveness of sound modern education. The Michigan Education Association assembly will vote in the spring of 1950 on retaining St. Mary’s Lake Camp as its property for uses such as these. It is now theirs on lease from the Kellogg Foundation.

Grand Rapids administrators guiding this adventure in adolescence, human sympathy, and understanding are S. R. Upton, Sr., principal of Grand Rapids Central; Marian Campbell, directress of personnel; Jay L. Pylman, now assistant to the Grand Rapids superintendent; and Ben Buikema, advisor to Central’s seniors.

Kiski Study Plan Cuts Pupil Failures

A CONCENTRATED study plan has enabled Kiskiminetas Springs School to cut student failures from approximately 11 percent to six percent. This Saltsburg, Pennsylvania, preparatory school instituted the system six years ago.

The Kiski plan has three parts:

1. Concentrated study of one subject at a time, from 8:30 to 3, five days a week for nine weeks.

2. Universal athletic activity from 3 to 5.

3. Voluntary cultural activities from 7:30 to 9:30 each evening.

The study plan differs from the usual not in time, but in concentration on one subject. Six basic study hours of each day alternate between one hour of supervised study and the following hour of

recitation in small classes of not over 15 students. For those whose weekly grade is 80 or above, there is no homework. Those who cannot maintain a grade of 80 or more have one hour of additional study in the evening. Should a student’s weekly grade drop below 70, two hours of evening study are required until he raises his grade.

A daily minimum of one hour of athletic activity, before dinner, for each student is required by the athletic plan.

Activities include a wide range of indoor and outdoor sports. Many other voluntary sports such as golf or rifle shooting, for which no credit is given, are carried on outside of the regular teams.

Part three of the plan aims to develop each student’s interest in cultural subjects and enable him to enjoy his leisure hours in a constructive manner. The number of activities a student may undertake depends almost entirely on his interests

For more facts use Inquiry Card, SM-44K



More than ever, in 1950, the famous Superior Pioneer is the coach that’s first in the field—first for safety, first for

durability, first for comfort, first for beauty—first by every standard of comparison.

Superior’s exclusive all-welded “Unistructure” frame—world’s strongest—has been engineered for even greater strength. Increased vision; more adjustable, form-fitting driver’s seat; and more conveniently located controls—boost driving safety. Extra-rugged, wrap-around bumpers—heavily padded, two-tone passenger seats—enhanced modern appearance inside and out—feature after feature of this new coach surpasses anything offered by competition.

The Superior Pioneer All-Steel Safety School Coach far exceeds minimum safety standards—offers vital protection provided by no other bus—gives you today’s greatest dollar-for-dollar value. Write for more

information on this outstanding new school coach built by the manufacturer that has pioneered most of the “Safety Firsts” that are standard on school buses today—Superior Coach Corporation, Lima, Ohio.



JOE PALOOKA SAYS—

“School bus safety rules are about the same as these for winning a fight.”

Our Mom Fisher, creator of America’s No. 1 comic strip hero, has cooperated in providing an attention-compelling poster for your bulletin boards and a handy comic booklet for distribution to your pupils. Joe Palooka’s valuable tips make boys and girls feel that it’s smart to observe school bus safety rules. Send for these free aids to safety education now!

Please send the following quantities:

POSTERS _____ BOOKLETS _____
NAME _____ TITLE _____
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CITY _____
COUNTY _____ STATE _____

Mail this coupon to Superior Coach Corp., 20 Kirby Rd., Lima, Ohio

FOR SAFETY FIRST LOOK TO
Superior

Kiski Study Plan

(Continued from page 35)

and the amount of his leisure time. If a group of five or more wish to play chess, collect stamps, study photography, or make model airplanes, a club is formed and the members decide when to meet with a faculty adviser.

With the Kiski alternating recitation-study hour plan the student has no interruptions, and all students are prepared

when they come to class. The teacher can devote his entire time to a single subject and to keeping in intimate touch with the progress of each student.

The boys like the concentrated study plan. They find that they do not forget what they have really learned. Boys who have taken three years of Latin with a year's break between each succeeding course state that they retained what they had learned sufficiently well during the intervening period to pick up their Latin

again and go on successfully with it.

Teachers like the new system because all students are prepared for each class. The teacher knows the boy's time is devoted exclusively to his subject. He also can require one or two hours study in the evening for boys who need it.

In addition to lowering the percentage of failures, Kiski finds students' records show that the average of the grades above passing has had a substantial rise in the six years of the plan.

For more facts use Inquiry Card, RM-43K

What a Rauland Sound System Will Do For Your School



Simplifies Administration

Have efficient control and coordination of all activities. Cut the volume of written carried messages—make announcements without routine-disturbing assemblies (to selected classrooms or to the entire school)—take attendance records speedily—have safe, sure centralized supervision of fire drills and emergencies. Have at your fingertips instant two-way intercommunication between any classroom and central office for effective administrative supervision.

Stimulates Learning

Provides dramatically effective teaching materials otherwise unavailable. Radio broadcasts, records and school-produced "live" broadcasts channeled to selected rooms, vitalize instruction in history, current events, geography, languages, music appreciation, speech, drama—enhance the whole range of grade and course requirements. Record music provides rhythm for physical education, cafeteria entertainment, background music for disciplined assemblies and dismissals—these and a host of other valuable functions.

Make sure your Sound System will have these features:

1. Every desirable program service: Radio, Phonograph, Microphone and intercommunication.
2. Distribution of programs to any selected room or to all rooms.
3. Two or three program facilities simultaneously to different groups of rooms.
4. High Fidelity AM and FM Radio (one or two as desired).
5. Three-Speed Transcription Type Phonograph.
6. Facilities for broadcasting any room activity over the entire system.
7. Adequate microphone circuit.
8. Master Emergency Call button operating regardless of any control or switch setting.
9. Automatic Program Schedule Clock.
10. Compartments for storing records and accessories, including sliding shelf for recorder.

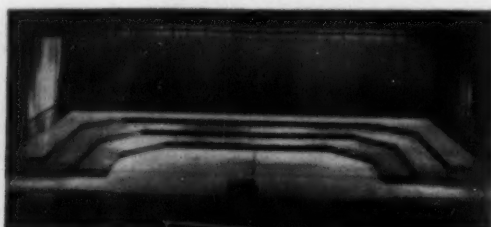
Let us show you, without obligation, how the RAULAND SC180A System (Illustrated above), incorporating all of these features, can enhance the administrative and educational program of your school. Write us today.

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for **BAND
ORCHESTRA
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Mitchell FOLDING • PORTABLE • STANDS

IMPROVE APPEARANCE AND PERFORMANCE

Add "Audience Appeal", assure better acoustics: better discipline: better direction. 3 or 4 elevations available. Sturdy, safe, easy to handle units with tubular steel folding legs... rigid when set up. Complete stand as shown in above pictures stores in a space 4' wide, 8' long and 6' high. You buy only as many units as you need to fit your requirements.

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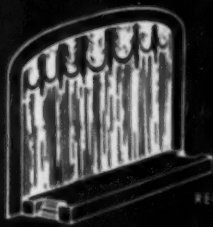
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For more facts use Inquiry Card, RM-47K

Complete STAGE EQUIPMENT

- Curtains
- Window draperies
- Stage curtains
- Lighting equipment
- A-cornets
- Floor masks
- Stage hardware
- Asbestos curtains
- Heavy curtains
- Ladders
- Stage "egg" rig
- Ladder rope rigging

20 years of experience manufacturing, installing, and servicing stage equipment for churches, schools and institutional auditoriums.



Planning? Intend buying? An Cray will be glad to acknowledge your inquiries promptly.

REQUIREMENTS FOR QUOTATIONS

1. Width and height of proscenium
2. Height from stage floor to ceiling
3. Depth of stage
4. Width on stage

Upon receipt of measurements, samples and price will be mailed upon request. For descriptive literature, specify in Encl. No. 102

ART CRAFT

THEATRE EQUIPMENT CO.

108 WEST 46th STREET NEW YORK 19, N. Y.



PICTURED above is the first in a series of posters being offered to schools and libraries by the American Music Conference. Aimed at stimulating children's interest in music, other posters in the series will present different approaches to the theme that every child can benefit from musical activity in the school. The 3-color, 17 x 22-inch posters can be obtained from the American Music Conference, 332 South Michigan Avenue, Chicago 4, Illinois.

A TOTAL of \$165,111.77 and regents credit are the rewards Kingston High School students have earned for some 300,000 hours of work experience in the fields of retail distribution and office clerical work during the past 16 years. *The New York Bulletin to the Schools* adds that the average hourly wage was 59 1/3 cents.

The work experience program is carried on by the business department of the school under the direction of Loryne Connick. Many of the local business firms are cooperating with the schools in the project.

For more facts use Inquiry Card, RM-48K



CONTINENTAL FENCE

SAFETY AND PROTECTION THAT LASTS AND LASTS

No other fence provides such long-lasting protection at such low cost per year of fence life. No other fence is made of KONIK steel which contains copper, nickel and chromium for greater strength and longer life. And in addition, Continental Chain Link fence is galvanized after weaving for extra protection against rust and corrosion. For complete information on this better fence, write Continental at Kokomo, Indiana.

*Trade Marks Reg. U. S. Pat. Off.

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Please send FREE copy of
"Planned Protection"—com-
plete manual on property
protection.

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**CONTINENTAL
STEEL CORPORATION**

You Can Refinish Desks in Light Colors

IF you have old, dark classroom desks that are an eyesore to look at and hard on the eyes, they can be refinished in light colors—and by your own maintenance men. It's not an easy job, according to an article prepared by the American Seating Company for the *OAPSE Journal*, but the results are satisfying.

Major problem is removal of the old finish from the wood parts. The old dark finish must be removed down to the white wood. Many of the wood surfaces and edges are curved, and cannot be sanded or planed easily. Disassembly helps, but wood and metal parts are not always easily disassembled.

Lacquer or Stain?

A lacquer or varnish finish can be removed with a solvent, but stain can be removed only by sanding or planing. Solvents are messy and difficult to handle and are not recommended. Finish removal by bed-type planer is limited to flat surfaces, such as desk tops. It requires removal of the top from the desk and disassembly of all attached metal parts. The most practical solution is use of a belt-type sanding machine.

The amount of wood that can be removed by sanding the top surface of either plywood or solid wood is dependent upon the length of the wood screws attaching the panel to the supporting structure. In most cases $3/32$ inch to $1/8$ inch is maximum amount that can be sanded off. A solid wood panel is weakened more by the sanding than is the plywood.

Once the finish has been removed, the unprotected wood should not be allowed to stand for any length of time. It will absorb or give off moisture, particularly if refinishing is done during a change in season when the humidity varies widely. This may result in warping or checking of the part. Prepare only as many units as can be refinished and protected with undercoating the same day.

A shellac sealer coat and a synthetic varnish finish coat are suggested for surfaces that are to be finished natural. This was selected after considering the factors of availability through local sources and the possible difficulties in application.

Experience indicates that only flat surfaces, or surfaces having only slight curvature, should be sanded down and finished natural color. Other wood surfaces, such as the edges of the desk top, that are exposed and within the field of vision can be finished in an opaque enamel of a light color that approximates the reflectivity of the natural finish.

Metal parts need only be cleaned and free from rust before re-enameling. The old enamel does not have to be removed.

Here's the Procedure

Following is the procedure for refinishing the desks. Trying it out on a few desks will help determine the best sequence of operations, and give an accurate check on the time required and the amount of materials needed for the entire project. The quantities of the finishes needed can be estimated on the basis of 400 square feet coverage per gallon. This is an average only and will vary with the thickness of coating applied and with viscosity of the material.

1. Carefully inspect desks and determine the following:

Wood surfaces that will be sanded down to white wood and be refinished natural.

Wood surfaces that will be finished with enamel.

Wood surfaces that will remain dark

walnut. (This will probably include under surface of tops, back rails, seats, and any surfaces not normally visible.)

Metal surfaces that are to be enameled.

2. Determine whether desk can be easily disassembled, and, if so, whether it will assist the refinishing operations.

3. Select about 10 desks for an experimental run. The following quantities of material will be sufficient: 1 pint white shellac, 1 pint synthetic varnish, and 1 pint enamel for wood and metal parts.

4. Disassemble if it seems advisable.

5. Clean all wood parts with soap and water and rinse carefully. Sand by hand with 4/0 paper those wood surfaces that will need to be finished with the opaque enamel.

6. Clean all metal parts with an alkali cleaner, and sand lightly with 4/0 paper. Remove rust spots with sandpaper. Wipe clean with rag.

7. Remove the old finish from the surfaces that are to be finished in natural

color. Use a 3-inch-wide belt sander with vacuum attachment for picking up the dust. Make rough cuts using 15/0 Garnet paper. Belt of sander should travel parallel to the grain, but sander should be pushed back and forth across the grain. Several light cuts are better than one heavy cut. The sander should not be held in one spot on the surface. Change belt when it becomes gummed up with old finish.

When stain has been removed, polish

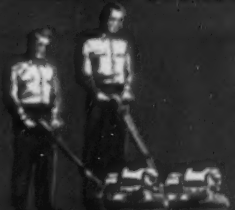
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NEW...IMPROVED

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EASY TO OPERATE!



SOLVES CLEANING PROBLEMS ON:

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All New Compositions

Send Coupon Today!

Increases LIFE and LUSTER of floors

...RANGE OF SIZES! Solve your floor cleaning problems with the new improved American DeLuxe ...new sizes, 14", 16" and 19" brush spread. Ample power for all floors ... saves time and labor in scrubbing, scouring, steel wooling, polishing, buffing, disc sanding ... maintains full brush speed on any floor.

...ADJUSTABLE HANDLE! Can be set at vertical for storing, or proper angle for tall or short operators. 90° swing. Easily detached for storing or transporting. Has Safety-Grip Switch for positive off-on action ... prevents machine from starting accidentally when plugged in.

...MAIN FRAME ... with new easily replaceable rubber bumper guard.

...CORROSION-RESISTANT WIDE-MOUTH TANK ... optional equipment for all models. Capacity 15 quarts. Finger-tip control adjusts flow of liquid distributed through newly designed "Spray Feed" metal backed scrubbing brush. American-built dependability. Feature by feature —an ideal machine to keep floors right—at low cost!

SINCE 1903

AMERICAN

FLOOR MACHINES

The American Floor Surfacing Machine Co.

573 So. St. Clair St., Toledo 3, Ohio

☐ Please send illustrated bulletin and prices on new American DeLuxe Maintenance Machines. No obligation.

☐ Please arrange a FREE demonstration of the new American DeLuxe Maintenance Machine. No obligation.

Name

Street

City State

(Continued from page 37)
surface with 2/0 Garnet paper. Both belt and sander should travel parallel with the grain. Wipe surface free from dust.

8. Finish white sanded surfaces first. Brush on undercoat of white shellac. Always brush with the grain of the wood. Allow to dry for four hours and hand-sand lightly with 4/0 paper. Brush on coat of synthetic varnish. Allow to dry overnight or in accordance with manufacturer's instructions.

FORMATION of the National Citizens Commission for the Public Schools was characterized by Dr. James B. Conant, president of Harvard, as "one of the outstanding events in the history of education in this half century," when he spoke to 900 laymen and educators at the first annual dinner of that group in New York City. (The Edpress News Letter, previous to Dr. Conant's speech, had named the organization of this group as the outstanding 1949 educational event.)

According to Henry Toy, executive director of the Commission, scores of local commissions in widely scattered communities have already drawn up programs for the improvement of public education. Since May 1949, when the Commission was organized, to February of this year, 17 state-wide citizens' groups and at least 150 community groups have been formed. Before 1951 there will probably be more than 1,000 local citizens' groups working for better schools.

For more facts use Inquiry Card, SM-30K

for the first time in America...

A Floor Maintenance Machine that
VACUUMS and POLISHES
AT THE SAME TIME!

We proudly present the Columbus Machines, the most unique floor maintenance equipment ever developed.

At schools, hospitals, hotels, institutions... wherever a hygienically clean floor is desired COLUMBUS is the answer. It sucks dust from the floor at the same time that it polishes.



Model No. 3

With the COLUMBUS, you reduce labor costs... save time... save materials in efficiently cleaning and polishing floors. You no longer need several machines to maintain floors; the COLUMBUS vacuums and polishes it the same time.

The Model #3 easily converts in a few seconds by means of attachments into a vacuum cleaner for cleaning carpets, or a wet scrubbing machine. This combination machine is priced at \$180.

Equipped with 13" brush area overall, plus vacuum cleaner base and all standard attachments, including one set of polishing and one set of scrubbing brushes.

Model #3A, vacuum-polishing machine only, equipped with 13" brush area overall and one set of polishing and one set of scrubbing brushes. \$150.00

Squeegee Pickup for Model #3 and Model #3A. \$40.00

Model #1... heavy duty type vacuum-polisher, convertible to a wet scrubber, with 18" brush area overall, equipped with set of polishing and one set of scrubbing brushes. \$245.

These machines are equipped with a Universal Motor for 110 volts AC-DC current. Models #3 and #3A have a 1/2 H.P. motor. Model #1 has a 3/4 H.P. motor.

Remember a hygienically clean floor is not a polished floor... it is a vacuum-polished floor.

Immediate delivery!

Prices include delivery East of Mississippi River. Beyond this area prices are f.o.b. nearest freight depot.

Attention Dealers: Several choice territories are still open. For further information write to Dept. D.

NATHAN STRAUSS DIPARQUELL



For more facts use Inquiry Card, SM-31K

WINS HIGHEST PRAISE!
APPROVED AND USED IN SCHOOLS EVERYWHERE!

Ideal for music appreciation, public speaking, gymnasium etc.

Portable Record Player Variety Model

- ★ DELUXE PORTABLE CARRYING CASE in two-tone Leathersette. Plays 12" records with cover closed.
- ★ 3 TUBE (super performance) AMPLIFIER of latest design and skillfully engineered circuit using highest quality material and filtered for superb faithful reproduction of high fidelity.
- ★ 5 1/2" G.E. SPEAKER of heavy 85 ALNICO magnet assures audiotone reproduction.
- ★ SEPARATE VOLUME CONTROL to regulate your desired volume from a whisper to the full realism of an orchestra.

- ★ FULL RANGE TONE CONTROL incorporating the SYMPHONIC BASS and TREBLE.
- ★ PICK-UP ARM is of light weight with a sealed moisture proof crystal prolonging life of the records.
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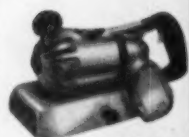
See your local school supply distributor or write direct for 1950 brochure and discounts

RMA
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SYMPHONIC RADIO & ELECTRONIC CORP.

270 MAIN STREET, CAMBRIDGE, MASS.
Manufacturers of America's most complete line of Record Players

For more facts use Inquiry Card, SM-32K



SKIL Belt Sanders



Make Desk-Tops Good as New in one fast, easy operation

Cut the time-costs of refinishing desks, cabinets, tables and other school-room furniture—with SKIL Belt Sanders. You get fully sanded, smooth surfaces, ready for stain and varnish, with no hand sanding. Your regular maintenance men—or even inexperienced helpers—will do fast, expert work with SKIL Belt Sanders. 600 foot per minute belt speeds; quick, positive belt tension adjustments and easy belt changing provide easiest operation. Ask your SKIL Distributor for a demonstration today.

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SKILSAW, INC.
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44 Portland St., Toronto, Ont.

SKIL Tools



Low brightness fixtures can be cleaned at the rate of one a minute with vacuum cleaner and brush attachment. Busy custodians appreciate this point.

Photo courtesy The Magazine of LIGHT

Booklet Aids Parents

BATTLE CREEK, Michigan, parents with pupils in or entering the elementary schools last fall received an attractive little handbook called *You and Your School*. Preface is a cordial message from Superintendent Virgil M. Rogers telling them how important it is that they visit school regularly, and how welcome they will be. Following this welcome are vital facts for parents on school hours, school clothing, reports, lunch arrangements, PTA, health service, and other opportunities available to the school child.

The booklet closes with wise suggestions as to how parents can supplement the school program to give their child a better adjusted and happier personality. Included are such activities for the child as going places and having simple operations of the busy world explained to him, playing and sharing with other children his own age, having a chance to know all kinds of people so as to appreciate them regardless of race, creed, or color, and being assigned definite responsibilities in the home.

For more facts use Inquiry Card, SM-33K

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PRINCIPAL

In Stated Brass 7 1/2" x 1 1/2" ONLY 75c ea.

Large polished brass letters on deeply etched black ground. Easy to read, durable and dignified in appearance. Use each in any quantity. Hand-drawn of titles for schools. Write for list. A few titles listed below:
1st Grade—2nd Grade—etc. to 80th, 1st-2nd Grade to 7th-8th Grade, Room A—Room B—etc. to Room F, Assembly Room—Auditorium—Boys' Locker Room—Boys' Shower—Cafeteria—Chemistry—Clock Room—Domestic Science—Gentlemen—Girls—Girls' Locker Room—Exit—English—Gymnasium—Kindergarten—Principal's Office—etc. Immediate shipment. ORDER FROM YOUR SCHOOL SUPPLY DEALER or write direct.

THE HOFF METALCRAFT

234 So. 4th Street Minneapolis 1, Minn.

- PRINCIPALS
- SUPERINTENDENTS
- GUIDANCE DIRECTORS

If you find it difficult to recommend a boarding school to meet the needs of a specific student, we would be glad to help you. The staff of the School Bureau has visited all types of schools throughout the country. Write us fully giving all pertinent information. We will select schools meeting the requirements and have catalogs sent to you.

School Bureau, Parents' Magazine
31 Vanderbilt Ave., New York 17, N. Y.

CHECK LIST OF NEW AUDIO-VISUAL AIDS

Use the SCHOOL MANAGEMENT coupon on page 25 or the Inquiry Card between pages 12-13. Indicate key number of item on which you wish to receive further information.

Educational Films

Prices subject to change without notice. In some cases rentals vary. Where true, the word "copy" is used. Send to distributor for rates. Where films are sent free, except for transportation charges, the word "loan" is used. All films are 16 mm. unless otherwise noted.

INSTRUCTIONAL FILMS, Inc. Dept. SM-K, 330 West 42 St. New York 18, New York, announces two films in "The Meaning of Number" series for practical teaching problems of elementary arithmetic classes. 1 reel each. Sale—\$45 each, black and white.

What Are Fractions? Examples from everyday child experiences are used to show the relationship of parts to the whole, the reason for writing a fraction as we do, the difference between the numerator and the denominator, and other important concepts. SM-300K.

What Are Decimals? The component parts of decimal fractions, the names the decimal requires in each respective place, the particular significance of the position of the decimal point, and so on are made clear to the pupil. SM-301K.

UNITED World Films, Inc. Dept. SM-K, 1445 Park Ave. New York 29, New York, offers three films for physiology classes on the high-school level. 20 min each. Sale—\$90, black and white; rental, \$6.

Digestion Part 1. A study of the mechanical and muscular processes involved in the taking in and digestion of food by humans. SM-302K.

Elimination. Shows the structure and elimination functions of the human skin, kidneys, lungs, and colon. SM-303K.

Circulation of the Blood. Presents a study of the systemic and pulmonary circulation of the blood. SM-304K.

BRITISH Information Services. Dept. SM-K, 30 Rockefeller Plaza, New York 20, New York, offers three films to help in understanding children. **Your Children and You.** 31 min. Sale—\$60; rent—\$3.75. SM-305K.

Concerned with the care of young children from the first month to the age of four or five. Realistically portrays the struggles of average imperfect parents and children.

Your Children's Eyes. 20 min. Sale—\$47.50; rent—\$2.50. SM-306K.

Amusing animated diagrams depict the physiology of the eye, show that rest, recreation, and good food are needed. **Your Children's Teeth.** 14 min. Sale—\$47.50; rent—\$2.50. SM-307K.

Explains the structure of first and second teeth and outlines the necessity of a well-balanced diet and proper care.

SM-325K—Jewel of the Pacific. 3½ min. Sale—\$8 mm. \$2.50; 16 mm. \$14.75. Silent. World in Color Productions, Dept. SM-325K, 108 West Church St. Elmira, New York.

Covers the rural sections of Hawaii, the great plantations, sugar cane growing, rice planting, and pineapple fields.

SM-328K—What Is a City 12 min. Sale—\$80, color; \$40, black and white. Rental—\$3.50, color; \$1.50, black and white. Bailey Films, Inc. Dept. SM-328K, 2044 No. Berendo St. Hollywood 27, California.

The location and the growth of cities in terms of the needs of the people and the work that they do are explained. As a mental stimulus to the students to think about their own city and other aspects of community living, the film ends with

the questions: Why was your city built in its present location? Will it grow larger than it is? Do you want it to?

BUREAU of Communication Research, Inc. Dept. SM-K, 13 East 37 St. New York 16, New York, offers two films on the new state of Israel. 11 min. each. Rental—\$13.50 each.

Israel Reborn. Documents in detail the political and military events leading up to the creation of the state on May 15,

1948. Reveals the transition of the Jewish community in Palestine as it took on the heavy responsibility of a state fighting for its life. SM-313K.

Israel in Action. A graphic account of the events leading to Israel's victory over the Arabs and its success on the diplomatic front of receiving recognition. SM-314K.

SM-315K—Why Study Foreign Languages? 1 reel. Sale—\$90, color; \$45,

black and white. Rental—available from film libraries. Coronet Films, Dept. SM-315K, Coronet Building, Chicago 1, Illinois.

Jim Baker can't see any use in studying foreign languages until his brother Dick returns from a trip to Europe and convinces him that he is wrong. The story demonstrates how knowledge of foreign languages contributes to enjoyment of travel, success of commerce, and harmonious international relations, and

For more facts use Inquiry Card. SM-34K

A NEW TAPE RECORDER that Every School can Afford!



ONLY
\$94.50
COMPLETE

including microphone,
take-up reel, radio-
phone plug, speaker
and amplifier.

Features of the New AMPRO MAGNETIC TAPE RECORDER AND PLAYBACK UNIT

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Today's greatest tape recorder value—only \$94.50 complete! This unit offers features not found on recorders selling for up to 50% more.

2 2 Hours of Recording on One Standard 7" Reel

Almost twice as much recorded material on each reel of re-usable tape... as compared with conventional tape recorders!

3 Completely Portable

The new design of this recorder makes possible drastic savings... in weight and bulk. It weighs less than any other recorder on the market today—a mere 7½ pounds—complete, in case.

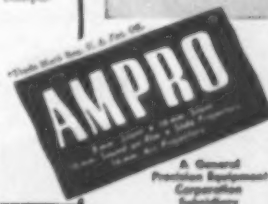
4 Simplest to Operate

A young child can operate this recorder. Operation has been reduced to its simplest terms. There are no complicated gadgets to confuse the operator.

5 Engineered, Built and Guaranteed by Ampro

... a name famous for more than 20 years for fine craftsmanship in the design and manufacture of precision motion picture equipment.

SEND COUPON FOR CIRCULAR giving full details, specifications, and illustrating many school uses for this basically new tape recorder.



SPEECH CORRECTION can be speeded up, made more effective through the use of before and after tape recordings of students' speech defects.

PUBLIC SPEAKING classes may make recordings of student speeches for later playback with corrections and criticisms.

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CONTROLLED DICTATION for shorthand and stenography classes is possible with hand-operated tape recordings which may be used over and over again.

SLIDES and FILMSTRIPS are far more effective as class studies through the use of tape recorded commentaries and backgrounds.

TEACHING MUSIC can be simplified by using tape recordings of professional musicians... comparing student efforts, making comparisons and corrections.

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CITY _____ ZONE _____ STATE _____

New Audio-Visual Aids

(Continued from page 39)

is necessary to the full appreciation of many great literary works.

SM-316K—Our Teacher, Mary Dean. 22 min. Sale—\$130, color. Frith Films, Dept. SM-316K, Box 565, Hollywood, California.

A sympathetic and personal presentation of an outstanding teacher and her

pupils. Shows her relationship with her administrators, and her family and friends. Also gives children an understanding and appreciation of their teacher as a person. For the elementary through high-school levels.

SM-336K—Wyoming and Its Natural Resources. 30 min. Sound, color. Loan.

Graphic Services Section, Dept. SM-336K, Bureau of Mines, 4809 Forbes St. Pittsburgh 13, Pennsylvania. Sponsored by the Sinclair Refining Co.

The largest open-pit coal mines in the world, a 90-foot-thick lignite seam near Gillette, and glimpses of the oil-shale formations at Rock Springs are shown. Scenes of cattle raising and sheep ranching, episodes in the annual rodeo at Cheyenne, and activities at the dude ranches are also included.

For more facts use Inquiry Card, SM-65K

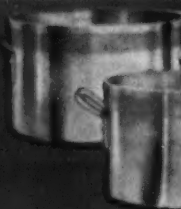
Specials

March 1 to April 30

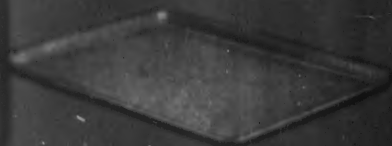
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Wear-Ever extra hard alloy 40-qt. Stock Pot
SPECIAL \$12.95
With cover—\$14.95
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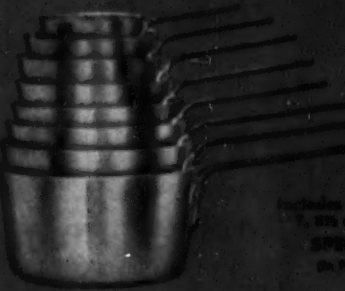


Wear-Ever extra hard alloy 2-qt. heavy-duty Sauce Pan
Also available as 4-qt. pan with long handle and soup handle as pictured to right.
SPECIAL \$19.95
With cover \$22.95
On No Ware—\$18.15
with cover—\$20.95



Wear-Ever extra hard alloy Sweet Pan
Bake an even crust and a tea uniform color because aluminum absorbs and conducts heat fast and evenly. Now adapted for new uses. Special wear-resistant finish. Well defined corners for a full tea table. Natural finish.

12 1/2 x 17 1/2 — \$3.95 Aluminum Dish — \$4.45
On No Ware—\$4.15 Aluminum Dish—\$4.65



Wear-Ever extra hard alloy 8-place Sauce Pan Set
Includes 1 1/2, 2 1/2, 3 1/2, 4 1/2, 5 1/2, 6 1/2, 7 1/2, 8 1/2 and 10-quart sizes.
SPECIAL \$29.95
On No Ware—\$28.95



Wear-Ever extra hard alloy 4-place Sauce Pan Set
Includes 2 1/2, 3 1/2, 4 1/2 and 5 1/2 quart sizes.
SPECIAL \$14.95
On No Ware—\$13.95

Wear-Ever extra hard alloy 30-qt. Stock Pot
SPECIAL \$8.95
With cover—\$11.95
On No Ware—\$7.95
with cover—\$10.95



See these specials on display at your dealer's or ask his representative about them when he calls. The Aluminum Cooking Unit Co., 404 Wear-Ever Bldg., New Kensington, Pa.



One of the pretty frocks which are seen in the film "Facts on Fabrics and Fashion"

SM-318K—Facts on Fabrics and Fashion. 23 min. Color. Loan. (Folder with swatches of fabrics shown in the film included.) Bates Fabrics, Inc. Dept. SM-318K, 80 Worth St. New York, New York.

Contains information about the making of fine fabrics and shows fashions that can be duplicated in the school sewing class or at home. For home economics and sewing classes.

SM-319K—Cadet Rousselle. 8 min. Color. Sale—\$50; rental—\$2.50. National Film Board of Canada, Dept. SM-319K, 1270 Avenue of the Americas, New York 20, New York.

Gay puppets illustrate the old satirical song about the clown of the period between the French Revolution and the military order of Napoleon. Cadet Rousselle falls down a ladder, tries on battlements, and even his dogs will not obey him. Especially useful for junior and senior high-school French classes.

SM-320K—Safety in the Chemistry Laboratory. 15 min. Sale—\$75, black and white. Rental—available from film libraries. Students' manuals in packets of 25, \$25. Audio-Visual Center, Dept. SM-320K, Indiana University, Bloomington, Indiana.

Opens with shots of professional chemists using safe practices in their work. Then shifts to a high-school laboratory where it shows the use of aprons and goggles, and stresses the necessity of other safety measures such as reading carefully the labels on bottles, using a fume hood, and avoiding tasting chemicals. A college laboratory is seen in additional sequences.

SM-321K—The Baby Sitter. 15 min. Sale—\$48; rental—available from film libraries. Young America Films, Inc. Dept. SM-321K, 18 East 41 St. New York 17, New York.

The story of Mary Gibson's first evening as a baby-sitter. Follows her as she cares for two small children. Points out the many things she has to learn in preparation for the job, such as feeding the children and putting them to bed. Designed for junior-senior high school level.

SM-331K—The Pipe of Plenty. 2 reels. Color. Loan. Jam Handy Organization, Dept. SM-331K, 2821 East Grand Blvd. Detroit, Michigan. Film was produced for the Michigan Consolidated Gas Company.

Tells the story of the vast pipeline construction from Detroit to the Austin Field, Michigan. Shows how the 153-mile, 24-inch pipeline was built over the toughest terrain in the dead of winter, against the odds of blizzards, subzero temperatures, frost, and mud.

SM-317K—Fire-Engines! 1 reel, Sale—color, \$90; black and white, \$50. Tompkins Films, Dept. SM-317K, 1046 West Edgeware Rd. Los Angeles 26, California.

Clearly explains the prime functions of the salvage wagon, the pump, and the hook and ladder, fundamental pieces of equipment found in most fire departments. Firemen are also seen in a routine drill. For students on the primary level.

HEIDENKAMP Nature Pictures, Dept. SM-K, 538 Glen Arden Drive, Pittsburgh, Pennsylvania, offers several color films in the "Birds of North America" series. 4 min. each. Sale—\$30 color, silent.

Mourning Dove, Yellow-billed Cuckoo, SM-308K.

Downy Woodpecker, Northern Flicker, SM-309K.

Hairy Woodpecker, Red-bellied Woodpecker, Yellow-bellied Sapsucker, SM-310K.

Red-headed Woodpecker, Pileated Woodpecker, SM-311K.

Ruby-throated Hummingbird (flight), SM-312K.

SM-322K—Sport of Orienteering. 2 reels. Color. Rental—\$2.50. Association Films, Inc. Dept. SM-322K, 35 West 45 St. New York 19, New York.

A fascinating new sport originated in Sweden. Involves cross-country running in which a special compass is used to guide the participants. Suitable for a summer camp or sports club activity.

SM-324K—South Africa's Modern Cities. 10 min. Sale—\$80, color; \$26, black and white. Rental—\$3, color; \$1.50, black and white. Films of the Nations, Inc. Dept. SM-324K, 62 West 45 St. New York 19, New York.

Shows the developments which have taken place in the last 60 years. Johannesburg, where the gold mines are

located, the growth of Capetown since the settling of the Dutch, and Durban with its large Indian population and its resort beaches, are pictured.

SM-330K—Educating in a Truer Light. 22 min. Sound. Color. Loan. Available from your local public utility company, Dept. SM-330K.

Intended for showing to parent-teacher associations, school boards, school administrators, and other groups interested in

the promotion of planned school lighting. Shows full-color illustrations of classrooms "before and after" modern lighting installations, and case histories of school relighting projects.

SM-333K—This Is Oklahoma. 31 min. Color. Loan. Oklahoma State Planning and Resources Board, Clarence Burch, Chairman, Dept. SM-333K, State Capital, Oklahoma City, Oklahoma.

Shows something of the scenic, rec-

reational, historic, and beauty spots of Oklahoma's 77 counties. Will Rogers Memorial, Platt National Park, state lakes and rivers, Indians, rodeos, buffalo, and so on are included.

SM-332K—Adventure in Color. 16 min. Loan. Film Library, Utah State Dept. of Publicity and Industrial Development, Dept. SM-332K, Room 111 Atlas Bldg. Salt Lake City, Utah.

Shows scenic high lights of Utah in-

For more facts use Inquiry Card SM-36K

The leader in **SCHOOL BUS SAFETY** and **VALUE**



Reo . . . The Only Complete School Bus

THE Reo Safety School Bus is the first and only complete body and chassis unit in the school transportation field. Basic design and construction make it the safest complete school bus in the field. And only Reo offers undivided service responsibility for body and chassis.

Unit engineered, the Reo Safety School Bus offers the highest safety factor and, through basic engineering, is built for long, economical life . . . at least 10 to 15 years of excellent service.

Check Reo with any school bus! Complete body and frame construction . . . seat arrangements and door design. Check for full driver vision . . . brakes . . . engine . . . easy service and maintenance design . . . freedom from leaks and squeaks.

EXTRA POWER! If your school bus route covers unusually hilly country, you can solve your power problem with a Reo Gold Comet engine. These sensational new power plants are now available as optional equipment for Reo Safety School Buses.

School Bus Division, Reo Motors, Inc., Lansing 20, Mich.

The one and only school bus that exceeds all safety standards set by The National Education Association.

REO
SAFETY SCHOOL BUS

Our Audio-Visual Committee

THIS listing of educational films was compiled and edited by Jane Bonneville with the cooperation of the following committee:

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New York University Film Library
Louise Condit,
Metropolitan Junior Museum

Leslie E. Frye,
Director, Division of Visual Education,
Cleveland Board of Education

Carolyn Goss,
Audio-Visual Center,
Indiana University

Gerald D. Coubie,
Head, Audio-Visual Aids Dept.,
University of Georgia

Nelle Lee Jenkins,
Director, Division of Audio-Visual Education,
St. Louis Board of Education

Dr. Grace Ramsey,
American Museum of Natural History

Mrs. Esther Spreyer,
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Herbert R. Jensen,
Manager, Columbia University Educational Films

Charles E. Luminati,
Coordinator of Audio-Visual Instruction,
Great Neck, New York.

New Audio-Visual Aids

(Continued from page 41)

cluding the High Uinta Mountain Lakes, Arches National Monument, Navajo Indian, Mexican Hat, Bryce and Zion National Parks, and many others.

SM-126K—The Roosevelt Story. 80 min. Rental—\$17.50 for free admission showing; \$35 where admission is charged. Free study guide included. Brandon

Films, Inc. Dept. SM-326K, 1700 Broadway, New York 19, New York.

A feature length film biography of Franklin D. Roosevelt. Covers more than 40 of the most critical years of this nation's history. Suitable for junior and senior high-school classes in English, history, civics, government, and sociology.

SM-339K—Wonders in a Country Stream. 1 reel. Sound. Sale—\$80, color; \$40, black and white. Churchill-Wexler Film Productions, Dept. SM-339K, 137 No. La Brea Ave. Los Angeles 36, California.

A boy and a girl go to a country stream where they discover a baby turtle, frog and pollywog, newt, caddis-fly nymph, damselfly, garter snake, and water striders. Suitable for primary and elementary grades.

Filmstrips

SM-350K—You and the NEA. 96 frames. Color. Sale—\$2. (Also available on loan basis from your state education association). National Education Association, Dept. SM-350K, 1201 Sixteenth St. N. W. Washington 6, D. C.

Tells the story of the services of the NEA to the children and teachers of the nation. Presents cases which demonstrate the ways in which all of the resources of the organization are constantly at work for its members.

For more facts use Inquiry Card. SM-57K

FREE!

You can reduce your maintenance costs



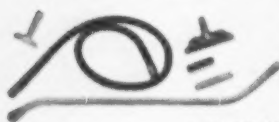
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Modern maintenance requires modern methods!

In buildings of all sorts, General Electric Heavy-duty Vacuum Cleaners are speeding up the cleaning job, cutting down maintenance expense.

All models and sizes, including furnace cleaner, heavy-duty hand cleaners, and special tools, are shown in a new catalogue which is yours on request. We'll gladly arrange for a survey of your building's cleaning requirements and recommend proper cleaning equipment without obligation. Use the coupon for convenience.

Moderate-priced lightweight model is convertible to wet pickup at small extra cost.



Model AVI 10PWP



Commercial Cleaners
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1285 Boston Ave., Bridgeport 2, Connecticut

Our most serious cleaning problem is

Without obligation, please send new catalogue. We'd like a survey (check if desired)

NAME

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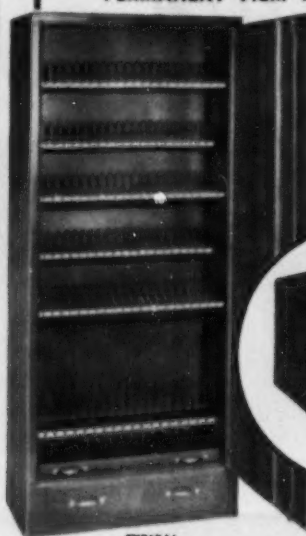
ADDRESS

CITY

STATE

For more facts use Inquiry Card. SM-58K

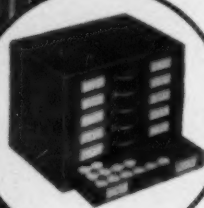
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OVER 20 MODELS
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FIRE-RESISTANT
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Model MF-4
Holds over 100 filmstrip cans, each in its own place and indexed. Six drawers — adjustable dividers.



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Folder SM-6

Territories Available for Distributors

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248 East 34th Street, New York 16, N.Y.

EYE Gate House, Inc. Dept. SM-K, 330 West 42 St. New York 18, New York, announces the "American Indian Life" series of nine color filmstrips which compare and contrast ways of Indians in different sections of our country. Sale—\$22.50 for the set; \$3.95 each. Teacher's manual included.
Indian Houses. SM-351K.
Indian Food. SM-352K.
Indian Clothing. SM-353K.
Indian Crafts. SM-354K.
Indian Decoration. SM-355K.
Indian Ceremonies. SM-356K.
Indian Games. SM-357K.
Indian Transportation. SM-358K.
Indian Communication. SM-359K.

SM-367K—Machine Sewing. 39 frames. Black and white. Free to teachers of sewing in junior and senior high schools. Available from your local Singer Sewing Center, Dept. SM-367K.

Designed to aid, through demonstration and motivation, in teaching the student the correct way to thread and to prepare the sewing machine for stitching.

SM-368K—How to Study. 68 frames. Sale—\$3. Visual Sciences, Dept. SM-368K, Box 599 SM, Suffern, New York.

Using the Army style of cartooning, shows how "Joe" overcame his study troubles. A tool for establishing successful study habits from the seventh grade through high school.

SM-366K—Flicka, Ricka, Dicka. \$19.50 for set of six color strips. Popular Science Publishing Co. Dept. SM-366K, Audio-Visual Division, 353 Fourth Ave. New York 10, New York.

Tells the adventures of three small

For more facts use Inquiry Card. SM-60K

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EASY STEPS
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WRITING SERIES
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First Grade Pupil's Book \$3.00
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1001 REVIEW EXERCISES IN ARITHMETIC by William Jansen, (Supt. N. Y. C. Schools)	
A complete Review of fundamentals in Arithmetic taught in Grades 1 to 5 . . . Extra. Price \$3.00	
Order now or send for complete catalog	
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For more facts use Inquiry Card. SM-61K

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LIBRARY
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Any Wordings. Any Name. One, several or many. Deluxe Lifelike Engraved Plastic. Write for free circulars, sample.

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Finest Quality **Brushes** **ARTIST'S MATERIAL** **Colors**

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440 West 34th St., New York 1, N.Y.

Write for Price List

Swedish sisters. A condensed version of the popular stories. For use in the first, second, and third grades.

SM-360K—A Core Curriculum Class in Action. Sale—\$3, discussion guide included. Audio-Visual Materials Consultation Bureau, Dept. SM-360K, College of Education, Wayne University, Detroit, Michigan.

Film follows typical ninth grade core class from its first class meeting, through various teacher-pupil planned activities and the final evaluation of the work done. For use by secondary school classes and teacher training classes.



A frame from the Filmfax Productions filmstrip "The Rabbit and the Turtle"

FILMFAX Productions, Dept. SM-K, 995 A First Ave. New York 22, New York, offers a series of filmstrips "Friendship Fables" to be used for reading readiness in the primary grades. Sale—\$15 for set of four; \$4 each.

The Country Mouse and the City Mouse. 22 frames. Demonstrates the repetition of words. SM-369K.

The Crow and the Pitcher. 19 frames. Shows the use of the small words which bother children, such as too, very, up, as, and so on. SM-370K.

The Fox and the Stork. 19 frames. Illustrates the art of repetition of words. SM-371K.

The Rabbit and the Turtle. 23 frames. Demonstrates the use of "ing" words, such as running, slipping, looking, and so on. SM-372K.

THE New York Times, Office of Educational Activities, Dept. SM-K, Times Square, New York 18, New York, offers three filmstrips in the 1949-1950 "Report on the News" series. \$2 each.

Western Europe Rebuilds. 57 frames. Shows how the United States and Canada have helped and are helping Western Europe to rebuild her economy. The importance to Western Europe of the exchange of manufactured goods for food and raw material is stressed. SM-361K.

Labor in the News. 53 frames. Deals with what unions do for their members and the relations of unions with employers. Touches on the growth of unions since the Wagner Act was passed in 1935. Also considers the problem of strikes and the legal position of unions. SM-362K.

The New Face of Japan. 46 frames. Shows, against a background of her history for the past one hundred years, the steps taken by the Occupation to make Japan democratic. These include reforms in politics, education, and economics. The problems of her defense and our interest in her as a dependable ally are considered. SM-363K.

SOCIETY for Visual Education, Inc., Dept. SM-K, 1345 West Diversey Parkway, Chicago 14, Illinois, offers two recent color additions to the "Basic Science Series" filmstrips, produced co-operatively with Row, Peterson and Company.

Telling Trees Apart. Points out the basic characteristics of some of our common trees and shows how to identify unfamiliar ones. 44 frames, \$7. SM-364K.

Living Things. Illustrations point out

the identifying characteristics of some of our more common plants and animals. 43 frames, \$7. SM-365K.

ENCYCLOPAEDIA Britannica Films, Inc., 1150 Wilmette Ave., Wilmette, Illinois, offers "Animal Friends," a series of eight slide films for science and social studies classes in the middle grades. Complete series \$21.00; individual slide-films \$3.

Black Bear Twins. Two young, mis-

chievous bears romp in the forest, seek food, and explore a bee's nest, to their regret.

Common Animals of the Woods. Shows lives and habits of the squirrel, rabbit, raccoon, and other animals.

Elephants. Shows how elephants eat, drink, and bathe.

The Farm Dog. A day in the life of a collie shows him herding cows, eating, hiding a bone, and playing with his master.

Three Little Kittens. The growth and development of the kittens is seen.

Goats. Two humorous young goats and "Old Billy" are both amusing and instructive in their antics.

Gray Squirrel. A study of the life and habits of these familiar animals.

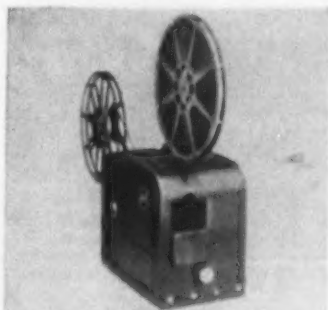
The Horse. Illustrates the development and training of a colt on a Kentucky farm. Explains the role of the horse in modern life, one which has been greatly changed.

For more facts use Inquiry Card, SM-61K

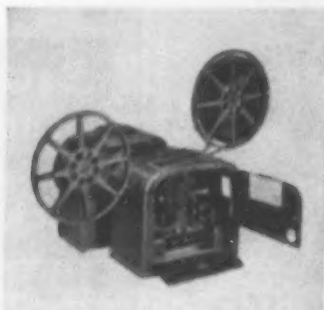
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Dept. SM-12



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NEW AUDIO-VISUAL EQUIPMENT

Use the SOUND MANAGEMENT system on page 21 of the Inquiry Card between pages 11-13. Indicate key number of item on which you wish to receive further information.

Sound-Slide Synchroniser SM-451K

An activating foil used with magnetic tape will synchronize a tape-recorded script with any automatic slide projector. As the tape passes a special switch on the recorder during playback, it sends a tripping pulse to the projector. Recording is made on the dual-channel Twin-Trax tape recorder. Maximum continuous message length is one hour. . . Use the Inquiry Card or write to the Amplifier Corporation of America, Dept. SM-451K, 395-44 Broadway, New York 13, N. Y.



Reelster Tape Recorder SM-445K

Tone quality and fidelity of picture-like realism is what the maker claims for the new Reelster. This easily-carried machine provides twin-track recording without interruption for rewinding. The Revers-A-Matic feature plays or records in two directions for one hour without attention. Threading of tape is simplified by the Three-A-Matic feature, and an electric eye volume indicator helps make perfect recording. Machine may be played and controls used with cover down. Hinged flap cover protects controls as well as space for cord and microphone when machine is carried. . . Use the Inquiry Card or write to Universal Moulded Products Corporation, Dept. SM-445K, 1500 Walnut St. Philadelphia 2, Pennsylvania.

Concertone Tape Recorder SM-449K

Excellent for school use is the high-fidelity Berliant Concertone Basic Recorder No. 401. With it even an unskilled operator may make quality transcriptions. It provides for instantaneous monitoring from the tape while recording. It has separate heads for high frequency erase, record, and playback. And it has forward and reverse high-speed rewind.

There are three dynamically balanced motors. Two speeds are provided—7.5 or 15 inches of tape per second. The machine plays either standard 7-inch or NAB 10 1/2-inch reels. It is quickly convertible to either a console or portable unit. . . Use the Inquiry Card or write to Berliant Associates, Dept. SM-449K, 9215 Venice Blvd. Los Angeles 34, California.



Three-Speed Turntable SM-446K

Here's news—of a precision, 3-speed turntable with dual-cartridge pickup assembled in a strong, portable case. It is the new-model, P-43 C transcription player. This machine plays back 16-inch transcriptions and 78, 45, and 33-1/3 r.p.m. records. It has an instantaneous speed selector and a cast aluminum turntable. The P-43 C can be plugged into an amplifier, radio, or central sound system. . . Use the Inquiry Card or write to Rek-O-Kut Company, Dept. SM-446K, 38-01 Queens Blvd. Long Island City 1, New York.

Filmstrip Storage Cabinet SM-448K

Schools that utilize many slidefilms and filmstrips will be interested in the MF-6 filmstrip storage cabinet. Its improved indexing and filing feature offers great convenience to users of slidefilm and filmstrip subjects. There is no increase in price. . . Use the Inquiry Card or write to Neumade Products Corporation, Dept. SM-448K, 330 West 42nd St. New York 18, N. Y.

PROJECTORS are owned by 52.6 percent of all Catholic colleges and schools in this country, and phonographs are owned by 62.5 percent, according to a survey conducted by *The Catholic Educator*. The schools contacted through the survey averaged audio-visual expenditures of \$251 annually, with the majority of the schools planning to increase their programs.

Good Lighting Here



PRACTICE sessions are fun now that the Arnold, Pennsylvania, High School music room has been remodeled and relighted. Sound-absorbing panels were applied to the walls and ceiling, and the quantity and quality of illumination were materially increased by the installation of fluorescent lighting. There are 50 to 55 foot-candles of light at music-stand level, well diffused to avoid distracting glare and harsh shadows.

CHECK LIST OF NEW PUBLICATIONS

Use the SCHOOL MANAGEMENT coupon on page 25 or the inquiry card between pages 32 & 33. Indicate key number of item on which you wish to receive further information.

School Plant

Planning Rural Community School Buildings. Prepared under the supervision of Frank W. Cyr and Henry H. Linn, aided by Kenneth H. Bailey, Warren W. Fabyan, and John E. Marshall.

More than 200 consultants—laymen, architects, and educators—appointed by chief state school officers in each state, cooperated in the preparation of the book. It is sponsored by the National Council of Chief State School Officers and published by the Bureau of Publications, Dept. SM-200K, Teachers College, Columbia University, New York 27, N. Y. 162 pages. \$3.75.

The book is the first to be published on planning school buildings in rural communities, and the first to show ways to house both school and community activities in the same building. The authors also discuss the space efficiency of some of the new "rubber-tire" classrooms, such as shops and certain laboratories, which can be moved from place to place in a trailer-type vehicle.

The book is published portfolio-style, illustrated with 66 floor plans of rural school units. Each plate is accompanied by suggestions explaining to the reader the possibilities of adaptations to his local community.

The first purpose of the book is to show the variety of educational and community activities which must be considered in planning a school building. The second aim is to show the solutions in such a concrete way that they can be visualized by the reader, and in a form that can be used to assist in arriving at a decision.

Among the variety of school units discussed and reproduced are the one-teacher, elementary, and secondary schools; the 12-year school; teacherages; kindergartens; shops and laboratories; auditorium-gymnasiums; libraries; kitchens and lunchrooms; vocational agricultural departments; home economics rooms; a school-bus maintenance shop; and a custodian's closet.

The authors feel that the one-story building is superior in the rural community, functionally, economically, and esthetically. A good rural school building, they conclude, must have seven characteristics to satisfy the needs of the children and the community. It must be func-

tional; adaptable for multiple use; flexible; promote health and safety; attractive; economical; and built on an adequate site.

Teaching

Rural School Management. By Ernest Hilton. American Book Company, Dept. SM-235K, 88 Lexington Ave. New York 16, New York. 278 pages. \$3.25.

Designed to help teachers who work in rural communities. Deals with prob-

lems of rural school management and with the aspects of rural life that bear directly on them.

Teachers in the Public Schools. (NEA Research Bulletin.) Research Division, NEA, Dept. SM-236K, 1201 Sixteenth St. N. W., Washington 6, D. C. 32 pages 50¢.

Gives a general summary of the present status of public-school teachers in the United States from the conditions

of entrance to the profession to the provisions that have been made for old-age retirement.

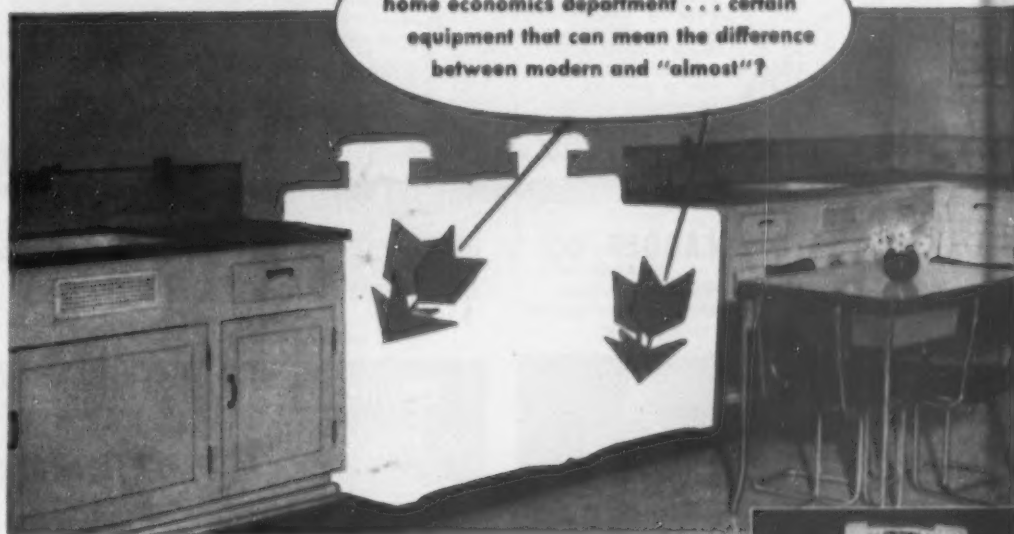
School Ideals. Edited by Van B. Hooper. Ideals Publishing Co. Dept. SM-237K, 3510 West St. Paul Ave. Milwaukee 1, Wisconsin. 124 pages. \$1.25.

Art reproductions in color, selected poems, articles, and inspirational items suitable for bulletin board or special classroom use. (Turn page)

For more facts use Inquiry Card, SM-6TK

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Is something missing from your home economics department . . . certain equipment that can mean the difference between modern and "almost"?



Most school officials today recognize the fact that the automatic Electric Range plays an increasingly important part in the American home. Surveys show that most schools with modern home economics departments give attention to the teaching of electric cooking. They know that students from homes having modern Electric Ranges want to learn their proper use. And it follows naturally that to teach them properly, the Electric Ranges in

your school's home economics laboratory must be of the most modern type, equipped with the best features now available. Old, outdated ranges or makeshift substitutes will not suffice.

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To help you in planning or remodeling the home economics laboratory of your school, we offer "THE MODERN HOME ECONOMICS DEPARTMENT"—a fine collection of floor plans from schools throughout the country. These include practical, working designs of home economics laboratories in actual use, as well as model plans for standardized rooms. A copy is yours for the asking. Use coupon!

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Name

Name of School

Street and Number

City, Postal Zone & State

Check List of New Publications

(Continued from page 45)

Public School Audiometry: Principles and Methods. By Lorraine A. Dahl. Interstate Printers and Publishers, Inc. Dept. SM-238K, 19-27 No. Jackson St. Danville, Illinois. 290 pages. \$3.

A textbook and manual for those who work in the field of hearing conservation. Contains detailed instructions for hearing testing.

Portfolio of Teaching Techniques. Educator's Washington Dispatch, Dept. SM-239K, Box 2, New London, Connecticut. 31 pages. 75¢.

Presents new facts and methods of invigorating classroom teaching including tested practices in group dynamics for the classroom teacher. A refresher course for all educators.

Speech Defects of School Children. Department of Public Instruction, Dept. SM-240K, Garfield B. Nordrum, superintendent, Bismarck, North Dakota. 23 pages. 25¢.

A handbook designed to give special assistance to teachers who deal with difficult speech and hearing problems.

Schoyer's Vital Anniversaries of the Known World for 1950. Will Schoyer and Co. Dept. SM-233K, 304 Ross St.

Pittsburgh, Pennsylvania. 29 pages. \$2.

A compilation of basic events, history and biography, human interest items, oddities, and anecdotes.

School Savings Journal for Classroom Teachers—Spring 1950. Education Section, Dept. SM-234K, U. S. Savings Bonds Division, Treasury Department, Washington 25, D. C. 12 pages. Free.

Among the features is "Saving as Part of Home Economics," an article by two home economics experts in the U. S. Office of Education, Dr. Berenice Mallory and Mary Laxson. There is also a lift-out poster, "The Best Stamp of All."

For more facts use Inquiry Card, SM-66K

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Handrails of steel guard the large roomy platform for added safety. Half of platform can be raised to form an extra step, when needed. These famous ladders can be set up instantly, are easy to carry and fold compactly for storing. Automatic locking feature insures safety while ladder is in use.

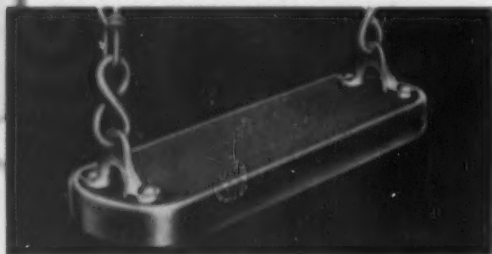
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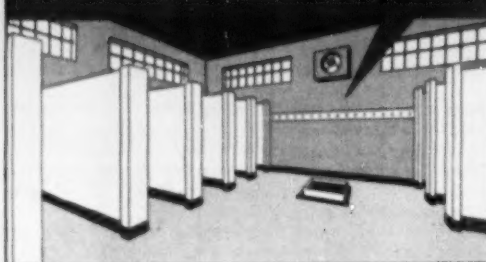
Durable Steel Construction —
Light enough for easy handling —
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Unusually quiet in handling and use, due to exclusive mechanism and rubber floor contact —
Grip the floor firmly —
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Furthermore, RAMUC contains a special fungicide that actively prevents the formation of mildew and eliminates musty, unsightly growths. Its hard, tile-like finish makes cleaning easy, too. Scrubbing and caustics will never dull RAMUC's smooth, sparkling appearance. And because one application lasts for season after season, you enjoy real dollar savings! For full information, write for Folder #582, today! *Trademark

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Guidance

Principles and Methods of Guidance for Teachers. By Clarence C. Dunsmoor and Leonard M. Miller. Revised edition. International Textbook Company, Dept. SM-212K, Scranton 9, Pennsylvania. 399 pages. \$3.75.

Provides a source for ready reference on concrete and usable techniques and materials for teachers who are charged with the responsibility for guidance. Also serves as a basic text for teacher-training institutions offering courses in the field.

Effective Practices in Guidance and Adjustment. Prepared under the direction of the Committee on Outstanding Practices, Ralph W. Proctor, chairman. New England School Development Council, Peabody House, Dept. SM-213K, 13 Kirkland St. Cambridge 38, Massachusetts. 21 pages. Members of the Council, 45¢; non-members, 80¢.

Contains reports of practices in guidance and adjustment, pupil progress, and administrative procedures in the New England area.

Charting Group Progress. By Saul Bernstein. Association Press, Dept. SM-214K, 291 Broadway, New York 7, New York. 24 pages. 75¢.

Material of interest to educators concerned with group activities.

McGraw-Hill Book Company, Inc. 330 West 42 St. Dept. SM-K. New York 18, New York, offers three books on guidance which will be useful for school administrators, teachers, and others in the field.

Group Guidance. By Robert Hoppock. 393 pages. \$3.75. SM-215K.

Considers problems of orientation, educational guidance, and vocational guidance. Presents material tested in the author's classes at New York University. Tells the beginner what to do and how to do it.

Guidance Handbook for Teachers. By Frank G. Davis and Pearl S. Norris. 344 pages. \$3.50. SM-216K.

Presents the philosophy of caring for the needs of the individual student, and outlines a program and the tools necessary for such activity. Especially useful to teachers in schools which do not have counselors.

Guiding Homeroom and Club Activities. By Ruth Fedder. 467 pages. \$4.50. SM-217K.

Meets the needs of teachers and club sponsors who are faced with the problem of developing a group program. Explains the sponsor's role in the group and discusses methods of evaluating group work so that it may continuously improve. Contains a detailed story of a boys' club and a girls' club, with emphasis on the techniques used to develop the group program.

NATIONAL Association of Student Councils. 1201 Sixteenth St. N. W. Washington 6, D. C. announces the publication of two new handbooks dealing

with the work and function of the student council. Free to members; others, \$1 each.

1949 Student Councils Handbook. 128 pages. SM-218K. Contains a report of the annual National Conference held in Cincinnati, Ohio, a description of a school Savings Bonds program, a critical evaluation of the entire student council movement by Earl C. Kelley and Roland C. Faunce, and a directory of student council members and associations.

The Student Council in the Secondary School. 350 pages. SM-219K. Deals with every phase of student council activity and gives actual examples of successful student council practices and procedures.

For Administrators

Recommended Equipment and Supplies. Association for Childhood Education International, Dept. SM-232K, 1200 Fifteenth St. N. W. Washington 5, D. C. 44 pages. \$1.

Tools of learning for nursery, kindergarten, primary, and intermediate schools, with name and address of manufacturer, are listed here. The bulletin contains a bibliography and an alphabetical index of all items by common and trade or brand names. Only approved materials are listed.

Textbooks in Education. A committee report. The American Textbook Publishers Institute, Dept. SM-203K, 1 Madison Ave. New York 10, N. Y. 139 pages. \$2.00.

An exceedingly informative, well written, and attractive book, this. Chapters cover the role of the textbook and its publisher; facts and figures; an outline of the procedures used throughout the country in the selection and purchase of textbooks; and a description of the editorial and manufacturing activities which enter into the transition from idea to book form. Also included is a short history of the textbook in America and an explanatory chapter telling just what the American Textbook Publishers Institute is.

New Products and Services. 1950 edition. New York Journal of Commerce, Dept. SM-207K, 63 Park Row, New York 15, N. Y. 80 pages. 50¢.

Lists more than 750 leading manufacturers and their new, 1950 marketing innovations. Cross-indexed by name and address as well as product.

New Government Publications

Office of Education publications listed below are available from Superintendent of Documents, Government Printing Office, Washington 25, D. C. Enclose coins. Stamps not acceptable.

State Legislation for Education of Exceptional Children. Bulletin 1949, No. 2. By Elsie H. Martens and collaborators. 61 pages. 20¢.

Gives an encouraging account of what the states have done through legislation to give to every exceptional child the educational opportunity which is his birthright.

Selected Bibliography on School Finance. 1933 to 1948. Bulletin 1949, No. 14. By Timon Covert. 47 pages. 20¢.

The listing includes a large number of doctors' dissertations.

The Place of Subjects in the Curriculum. By Elsie G. Bathurst, Paul E. Blackwood, Helen K. Mackintosh, and Elsa Schneider. Washington 25, D. C. 33 pages. 15¢.

Answers the question of where and how subject matter contributes to today's school program.

Business Experience for Business Teachers. Business Education Series

No. 18. By R. Frank Kyker. 11 pages. 5¢.

A guide for planning teacher-training programs.

100 Evening Schools. Bulletin 1949, No. 4. By Homer Kempler and Grace S. Wright. 71 pages. 25¢.

Provides selected information on activities, administrative practices, finances, organization, program, supervision, and teaching personnel of the schools.

Preparing Your Child for School. Pamphlet No. 108. By Hazel F. Gabbard. 23 pages. 15¢.

Prepared to help parents better understand and use the best ways possible to assure the child a fine start in school.

Frontiers in Homemaking Education. Home Economics Education Series No. 25. By Elizabeth Rinsir. 63 pages. 30¢.

Describes successful procedures for

initiating and maintaining education for adult homemakers as part of public school programs.

Records and Reports for Pupil Transportation. Special Series No. 2. By E. Glenn Featherston and Andrew H. Gibbs. 27 pages. 20¢.

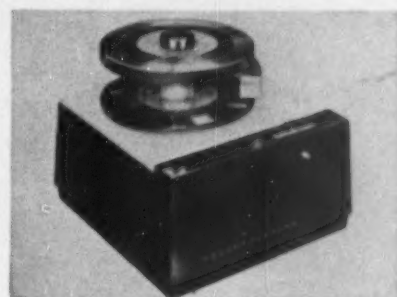
The report of a project designed to bring about more uniformity in accounting procedures and in records and reports used in the schools.

For more facts use Inquiry Card, SM-72K

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dustrial hall or other large auditorium, you ought to see "Carbon Arc Projection".

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